

# Permit Checklist

Permit # Issued: **VAG830391**

Case Manager: **JLG**

<b>FACILITY Name:</b>	<b>Corbalis to Fox Mill 54" Water Main</b>	Registration Statement Rcvd:	<b>03/02/2011</b>
Address:	Fairfax County Pkwy & New Dominion Pkwy, SE corner	Additional Info Requested:	<b>03/03/2011</b>
City, Zip	Reston 20190	Additional Info Received:	<b>03/04/2011</b>
County	Fairfax	2 <sup>nd</sup> Request for Addt'l Info:	<b>03/04/2011</b>
		2 <sup>nd</sup> Request for Addt'l Info Rcvd:	<b>03/07/2011</b>
<b>OWNER/RP Name:</b>	<b>Kassouf Co. &amp; Clinton Road Joint Venture (KCR)</b>	Administratively Complete:	<b>03/09/2011</b>
Address:	11654 Plaza America Dr., Ste 177	Technically Complete:	<b>03/03/2011</b>
City, State, Zip:	Reston, VA 20190	Signed:	<b>03/10/2011</b>
Phone / Fax:	216-409-7509 JKassouf@cregcc.com	1 <sup>st</sup> DMR Due:	<b>04/10/2011</b>
<b>Consultant:</b>	<b>NONE</b>	1 <sup>st</sup> Monitoring Period:	<b>MAR</b>

## CONTAMINATION:

- ☒ **Petroleum:**
☒ Gasoline
 ☒ Petroleum Products Other Than Gasoline  
     ☒ Unleaded ONLY
     ☐ Hydrostatic Testing  
     ☐ Leaded & Unleaded
     ☐ Chlorinated Hydrocarbons  
     ☐ Greater than 10% Ethanol

## Yes / No

<input checked="" type="checkbox"/>	<input type="checkbox"/>	Proper analytical data of raw wastewater received? <i>(Data should correspond with the type of contamination checked above. Ex: used oil includes VOCs, SVOCs &amp; Metals; chlorinated hydrocarbons include all constituents present.)</i>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Waterbody identified? <u>Sugarland Run</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Discharge frequency, volume and flow properly estimated? If no, circle missing/improper item.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Proposed wastewater treatment system diagram received?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<b>O&amp;M required? (Required if the facility's system does any type of storing or on-site cleaning / treating prior to discharging to state waters.)</b>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Topographic or other map received with the following properly identified:
<input type="checkbox"/>	<input type="checkbox"/>	Receiving waterbody
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Discharge point(s)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Property boundaries
		within ½ mile radius of proposed discharge:
<input type="checkbox"/>	<input type="checkbox"/>	Springs
<input type="checkbox"/>	<input type="checkbox"/>	Other surface waterbodies
<input type="checkbox"/>	<input type="checkbox"/>	Drinking wells
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Public Water Supplies (PWS)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<b>PWS within 5 miles of proposed discharge? (If within 5 miles, cannot issue a general permit.)</b>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Central wastewater treatment facility availability properly assessed?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Current permit issued by the Board? _____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	PC #? <u>IR2011-N-1934</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Hazardous waste?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Proper signature?

## EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

# of Outfalls: '001

Receiving Water: Freshwater

Contamination by: Both Gasoline + Other Petroleum Products

PWS: ☐ Yes ☒ No

List specific petroleum products causing contamination:  
Hydraulic oil, lubricating oil, diesel

DMR Limit Set #: 10

☒ Accepted

☐ Not Accepted

Case Manager's Signature: Joseph L. Glassman

**VPDES GENERAL PERMIT REGISTRATION STATEMENT  
FOR DISCHARGES FROM PETROLEUM CONTAMINATED SITES,  
GROUNDWATER REMEDIATION AND HYDROSTATIC TESTS (VAG83)**

*Please Type or Print all information*

1. Legal Name of Facility Corbalis to Fox Mill 54" Water Main –Work Site A
2. Location of Facility (Street No., Route No., or Other Identifier, and Telephone Number) South East Corner Of Fairfax Co. Pkwy & New Dominion Pkwy in Reston VA 20190
3. Facility Owner Name (individual or corporate) Kassouf Co. & Clinton Road Joint Venture (KCR)  
Owner Address: 11654 Plaza America Dr. #177,  
Street or P.O. Box  
Reston, VA 20190  
City State Zip  
Phone: (216) 409 – 7509 Email Address JKassouf@creqcc.com
4. Nature of the business conducted at the facility Utility Installation By Tunneling
5. Type of petroleum product(s) causing or that caused contamination. Machine Oil, Lubricating Grease, Hydraulic Oil, Motor Oil, Grease, Gear Oil, SEE ATTACHED MSDS SHEETS  
If chlorinated hydrocarbon solvents are the constituents of concern, list the chlorinated hydrocarbons present in water at the site. NA
6. Which activities will result in a point source discharge from the site? (Check all that apply)  
☒ Excavation Dewatering  
☐ Purging Ground Water Monitoring Wells  
☐ Aquifer Tests to Characterize Site Conditions  
☐ Hydrostatic Tests of Petroleum Storage Tanks or Pipelines  
☐ Hydrostatic Tests of Natural Gas Storage Tanks or Pipelines  
☐ Pumping Contaminated Groundwater to Remove Free Product From The Ground  
☐ Other Petroleum Product or Chlorinated Hydrocarbon Solvent Cleanup Activity  
☒ (specify) Mining Equipment Cooling activities (City Water Initial Source)
7. Has a site characterization report for this site been submitted to the Department of Environmental Quality?  
Yes ☐ No ☒
8. Characterize or describe the wastewater to be discharged including the types of contaminants present in the wastewater. Provide analytical data. See Attached MSDS Sheets & Water Sample Test Results
9. Identify the discharge point and the waterbody into which the discharge will occur. Southeast Corner of Fairfax Co. Pkwy and New Dominion Pkwy into culvert under 7100 Run off into Sugarland Run Stream
10. How often will the discharge occur (e.g., daily, monthly, continuously)? Continuously
11. Estimate how long each discharge will last: 550 days or 18 month (Present Project Duration) hours or days
12. Estimate total volume of wastewater to be discharged: approximately 8 million Gal.

13. Estimate maximum flow rate of the discharge: 15000 Gal/day.
14. Attach a diagram of the proposed wastewater treatment system identifying the individual treatment units.
15. Attach a topographic or other map which indicates the receiving waterbody name, the discharge point(s), the property boundaries, as well as springs, other surface waterbodies, drinking water wells, and public water supplies, which are identified in the public record or are otherwise known to the applicant, within a 1/2 mile radius of the proposed discharge(s).
16. Are central wastewater treatment facilities available to this site? Yes X No \_\_\_\_\_  
If "yes", has the option of discharging to the central facilities been evaluated? What was the result of that evaluation?  
**Yes it was evaluated, Discharge not allowed due to prohibition given by Saiful Islam Ph.D. with the Dept of Wastewater Planning & Monitoring Division see attached email.**
17. Does this facility currently have a permit issued by the Board? Yes \_\_\_\_\_ No X  
If yes, please provide permit number: NA \_\_\_\_\_
18. Pollution Complaint Number(s) (if applicable) None \_\_\_\_\_
19. Is the material being treated or discharged classified as a hazardous waste under the Virginia Hazardous Waste Regulation, 9 VAC 20-60? Yes \_\_\_\_\_ No X \_\_\_\_\_

20. Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. I do also hereby grant duly authorized agents of the Department of Environmental Quality, upon presentation of credentials, permission to enter the property for the purpose of determining the suitability of the general permit.

Signature: James K. Kassau Date: 03/3/2011

Print Name: **James R. Kassouf**

**Title: Partner, Kassouf & Clinton Road Joint Venture**

## REQUIRED ATTACHMENTS

Wastewater Characterization Analytical Data  
Treatment Works Design Schematic Drawing  
Topographic Map

***For Department Use Only:***

Waterbody \_\_\_\_\_  
 Basin \_\_\_\_\_ Stream Class \_\_\_\_\_ Section \_\_\_\_\_  
 Special Standards \_\_\_\_\_



## James Kassouf

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**From:** Islam, Saiful [Saiful.Islam@fairfaxcounty.gov]  
**Sent:** Friday, March 04, 2011 7:23 AM  
**To:** James Kassouf  
**Subject:** RE: Groundwater rev 3 of 3

Good morning James:

I reviewed the VPDES General Permit Application, water sample analysis and MSDS sheets. Unfortunately we do not allow groundwater remediation project generated wastewater to be discharged into sanitary sewer due to prohibition in our local codes. If you need more information, please call or email me and also you can visit our website.

*Thanks  
Sincerely*

**Saiful Islam Ph.D.**

*Environmental Health Specialist, Industrial Waste Section*

*Wastewater Planning & Monitoring Division  
Noman M. Cole, Jr. Pollution Control Plant  
9399 Richmond Highway  
Lorton, Virginia 22079-1899*

*Phone: 703-550-9740, ext 418  
Fax: 703-550-1071  
E-mail: [Saiful.Islam@fairfaxcounty.gov](mailto:Saiful.Islam@fairfaxcounty.gov)*

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**From:** James Kassouf [<mailto:jkassouf@creqcc.com>]  
**Sent:** Thursday, March 03, 2011 10:48 AM  
**To:** Islam, Saiful  
**Subject:** RE: Groundwater rev 3 of 3

Apologies no attachment

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**From:** Islam, Saiful [<mailto:Saiful.Islam@fairfaxcounty.gov>]  
**Sent:** Thursday, March 03, 2011 8:26 AM  
**To:** James Kassouf  
**Subject:** Groundwater

Good morning James:

I am providing you with the IWS website where you can browse information regarding the ordinance, permits and other associated information:

<http://www.fairfaxcounty.gov/dpwes/wastewater/industrialwaste/discharge.htm#limits>

*Thanks  
Sincerely*

**Saiful Islam Ph.D.**

*Environmental Health Specialist, Industrial Waste Section*

*Wastewater Planning & Monitoring Division*

Noman M. Cole, Jr. Pollution Control Plant  
9399 Richmond Highway  
Lorton, Virginia 22079-1899

Phone: 703-550-9740, ext 418

Fax: 703-550-1071

E-mail: [Saiful.Islam@fairfaxcounty.gov](mailto:Saiful.Islam@fairfaxcounty.gov)

# Exhibit A

## Emergency Response Report

### *Attachments*

1) USGS Maps.....	Pg 37
2) Site Diagram.....	Pg 40
3) Treatment System Diagram .....	Pg 42
4) Site Material Safety Data Sheets (MSDS) .....	Pg 44



# KCR Joint Venture

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11654 Plaza America Drive, #177 Reston VA, 20190

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## **Emergency Response Report**

**IR# 2011-N1934**

**Corbalis to Fox Mill Tunneling Operation Oil Discharge**

**12025T New Dominion Parkway  
Reston, VA 20190**

**Submitted to:**

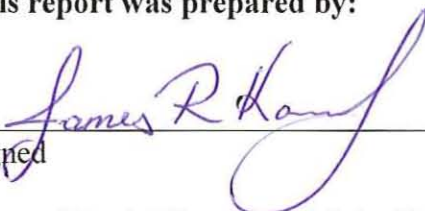
**VA DEQ, Northern Regional Office**

**Date: March 1<sup>st</sup>, 2011**



## Signature Page

This report was prepared by:

	James R. Kassouf
Signed	Name (Printed)
Kassouf Co & Clinton Road Joint Venture	March, 1 <sup>st</sup> , 2011
Company	Date
11654 Plaza America Drive # 177,	Reston , Virginia, 20190
Address, City, State, Zip	
(216) 409 – 7509	(216) 395 - 0101
Phone Number	Fax Number

## **Executive Summary**

KCR/Joint Venture is under contract to perform underground utility installation for Fairfax Water along Route 7100 in Fairfax County (Corbalis to Fox Mill Tunneling Operation). This project involves underground mining and excavation activities at a depth of approximately 45 feet for 8500 linear feet. The project is anticipated to last 18 months. The tunneling project involves the use of heavy equipment that utilizes hydraulic oils and petroleum lubricants during daily operation. The tunneling or boring equipment requires cooling during operation. Cooling is achieved by providing either city/county water or recycled water as the coolant. The tunneling operation also encounters spring and ground water. Together, these waters are pumped to the surface for discharge.

During initial start operations and fine tuning of equipment, hydraulic oils were released into the tunnel water and pumped to the surface where it was discharged through the silt/sediment control devices to an unnamed tributary of Sugarland Run adjacent to the construction activities.

On January 19, 2011 the release was discovered. KCR/Joint Venture, in response to Fairfax County Fire & Rescue and the VA DEQ, undertook measures to clean-up petroleum released from the site as well as implementing steps to prevent further release of petroleum product from the site. These activities are ongoing until at the present time and will continue until the site is discharging in accordance with a VPDES permit and all petroleum impacted soils have been excavated as detailed below.

KCR is implementing an on-site treatment system to eliminate petroleum from the discharge water. Initial steps include the addition of a sump in the excavation, installation of a sediment control box and an oil/water separator to prevent to discharge of free product. A system of bag filters and activated carbon filtration is currently being evaluated. A VPDES General Permit Resignation Statement is being submitted concurrent with this emergency response report. Initial water analysis of the discharge water from the oil/water separator is attached.

Upon implementation of a VPDES permit, KCR/Joint Venture will excavate petroleum impacted soils and gravel at the silt/sediment outfall. These impacted soils will be transported offsite for soil recycling at RECO Biotechnology in Richmond, VA. An initial composite soil sample for disposal has been analyzed for acceptance parameters into the disposal facility. The results are attached. Post-excavation soil analysis will be collected and analyzed to ensure that petroleum impacted soils have been properly removed.

A follow up report will be submitted documenting the final clean-up once the steps reference above have been completed.

## **General Site Information**

This project site is located at the follow GPS coordinates:

N 38°57'32.1  
W 077°22'10.8

The site is east of Route 7100 Northbound between the W&OD Trail and New Dominion Parkway. The Project site consists of a fenced gravel yard with office trails, storage containers, equipment lay down yard and the tunnel excavation opening.

Please see attached site diagram and topological maps.

## **Release Information and Initial Abatement Measures**

### **Release Description**

Hydraulic oil was released into the tunnel water during the initial start up and fine tuning of equipment. Tunnel water is defined here as the comingling of nature spring water, ground water and city water (used for equipment cleaning). Tunnel water, impacting with hydraulic oil, was pumped to the surface and discharged through the silt and sediment control devices and subsequently into an unnamed tributary of Sugarland Run. An estimated 40-60 gallons of petroleum product is suspected to have been released during the initial release. The quantity of oil release is based upon the estimated amount of oil used above and beyond the initial quantity necessary for equipment start up.

Ongoing operation of heavy equipment that utilizes hydraulic oil and petroleum lubricants in the tunneling operation creates a potential for ongoing/future contamination of tunnel water. This is due to cooling of equipment, general maintenance and incidentally failure of hydraulic lines/equipment during normal operation.

### **Initial Abatement Measures:**

The following actions have been implemented during initial abatement:

1. Mobilization of a vacuum truck to collect free product observed in tributary and around silt/sediment control devices.
2. Installation of approximately 8 layers of absorbent booms/sweep along the unnamed tributary. Installation of absorbent pads along silt and sediment control devices where free product has been observed. Currently these absorbents are checked, maintained and replaced as necessary on a bi-weekly basis.
3. Removal and replacement of initial silt bags and straw bales impacted with petroleum.
4. Installation of a sump inside the excavation/tunnel to facilitate the collection of free product prior to pumping tunnel water to the surface.
5. Installation of a sediment box (roughly 4,000 gallon) and an oil/water separator to collect free product in tunnel water after it is pumped to the surface.
6. Continued monitoring of oil/water separator and sediment box for the present of free product and utilization of a vacuum truck to collect and dispose of free product as necessary.
7. Copies of disposal manifests are attached.
8. KCR personnel working in the tunnel/excavation are receiving ongoing awareness training regarding the safe and clean operation and maintenance of equipment, specifically with regarding to the handling of petroleum products in the excavation.



## **Continuing and Plan Activities**

### **Water Management**

KCR/Joint is submitting a VPDES General Permit Registration Statement to receive a general discharge permit for the tunnel water. The Registration Statement is being submitted concurrent with this emergency response report. In addition to sump, sediment box and oil/water separator already installed, KCR is evaluating a system of bag filters and activated carbon filtration vessels to meet the discharge requirements of the VPDES permit. Initial water sample results are attached. The water sample was taken from the discharge tank on the oil/water separator and is representative of water for discharge post sump, post sediment box, post oil water separator, pre bag filters.

Once the water treatment system is fully installed, the system will be monitored in accordance with the requirement of the VPDES permit.

### **Soil Management**

Once the water discharge system under a VPDES permit is installed at the site, the soils, gravel, and straw associated with the original silt/sediment control devices will be excavated, transported and disposed of at an offsite soil recycling facility for petroleum impacted soils.

Post excavation sampling will be conducted to confirm removal of the petroleum contamination in the affected area.

The site will be restored to the existing grades with clean fill and stone. The silt/sediment control devices will be restored as deemed necessary in light of the treatment system and the requirements of Fairfax County.

The absorbent booms and pads around the point of discharge and downstream will be maintained and replaced as necessary until the above water and soil management tasks have been completed. A follow up report documenting completion of these tasks will be submitted to the VA DEQ upon completion.

## **Attachments**

Attached please find the following documents:

1. Water Analysis Certificates
2. Composition Soil (for disposal) Analysis Certificates
3. Petroleum impacted water and debris Disposal Manifests

# **Analytical Report for**

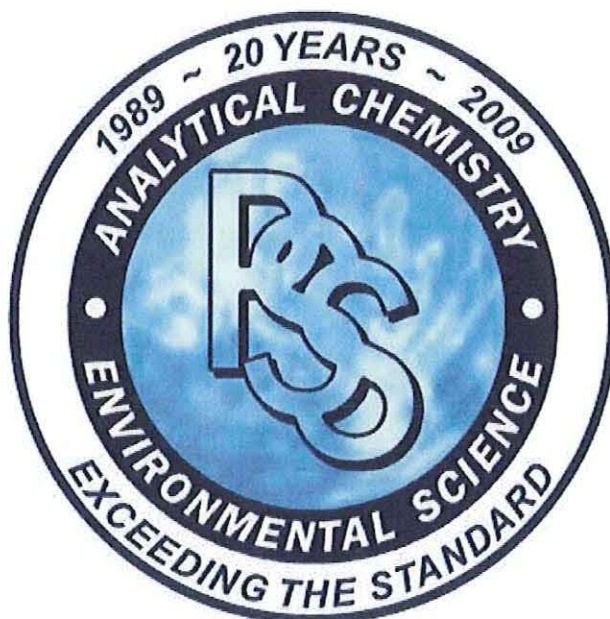
**Atlas Environmental Services, LLC**

**Certificate of Analysis No.: 11021711**

**Project Manager: Paul Stoecklin**

**Project Name : KCR**

**Project Location: 7100 Herndon, VA**



**February 24, 2011**

**Phase Separation Science, Inc.**

**6630 Baltimore National Pike**

**Baltimore, MD 21228**

**Phone: (410) 747-8770**

**Fax: (410) 788-8723**

6630 BALTIMORE NATIONAL  
PIKE  
ROUTE 40 WEST  
BALTIMORE, MD 21228  
410-747-8770  
800-932-9047

# PHASE SEPARATION SCIENCE, INC.



February 24, 2011

**Paul Stoecklin**  
**Atlas Environmental Services, LLC**  
P.O. Box 1490

Lorton, VA 22199-1490

Reference: PSS Work Order No: **11021711**  
Project Name: KCR  
Project Location: 7100 Herndon, VA

Dear Paul Stoecklin :

The attached Analytical and QC Summary lists the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Work Order numbered **11021711**.

All work reported herein has been performed in accordance with current NELAP standards referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual unless otherwise noted in the Case Narrative Summary. PSS is limited in liability to the actual cost of the sample analysis done.

PSS reserves the right to return any unused samples, extracts or related solutions. Otherwise, the samples are scheduled for disposal, without any further notice, on March 24, 2011. This includes any samples that were received with a request to be held but lacked a specific hold period. It is your responsibility to provide a written request defining a specific disposal date if additional storage is required. Upon receipt, the request will be acknowledged by PSS, thus extending the storage period.

This report shall not be reproduced except in full, without the written approval of an authorized PSS representative. A copy of this report will be retained by PSS for at least 10 years, after which time it will be disposed without further notice, unless prior arrangements have been made.

We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any que

**Dan Prucnal**

Laboratory Manager





**Sample Summary**  
**Client Name: Atlas Environmental Services, LLC**  
**Project Name: KCR**

**Project ID: N/A**

**Work Order Number: 11021711**

The following samples were received under chain of custody by Phase Separation Science (PSS) on 02/17/2011 at 01:15 pm

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
11021711-001	001	WATER	02/16/2011 15:00
11021711-002	002	WATER	02/16/2011 15:00
11021711-003	003	SOIL	02/16/2011 15:00

Please reference the Chain of Custody and Sample Receipt Checklist for specific container counts and preservatives. Any sample conditions not in compliance with sample acceptance criteria are described in Case Narrative Summary.

**Notes:**

1. The presence of common laboratory contaminants such as acetone, methylene chloride and phthalates, may be considered a possible laboratory artifact. Where observed, appropriate consideration of data should be taken.
2. The following analytical results are never reported on a dry weight basis: pH, flashpoint, moisture and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].

**Standard Flags/Abbreviations:**

- B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- C Results Pending Final Confirmation.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- Fail The result exceeds the regulatory level for Toxicity Characteristic (TCLP) as cited in 40 CFR 261.24 Table 1.
- J The target analyte was positively identified below the reporting limit but greater than the LOD.
- LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect. An LOD is analyte and matrix specific.
- ND Not Detected at or above the reporting limit.
- RL PSS Reporting Limit.
- U Not detected.



## Case Narrative Summary

**Client Name:** Atlas Environmental Services, LLC

**Project Name:** KCR

Project ID: N/A

Work Order Number: 11021711

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Any holding time exceedances, deviations from the method specifications, regulatory requirements or variations to the procedures outlined in the PSS Quality Assurance Manual are outlined below.

**Sample Receipt:**

All sample receipt conditions were acceptable.

NELAP accreditation was held for all analyses performed unless noted below. See [www.phaseonline.com](http://www.phaseonline.com) for complete PSS scope of accreditation.

SW-846 9078

OFFICES:  
6630 BALTIMORE NATIONAL PIKE  
ROUTE 40 WEST  
BALTIMORE, MD 21228  
410-747-8770  
800-932-9047  
FAX 410-788-8723

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 11021711

Atlas Environmental Services, LLC, Lorton, VA

February 24, 2011

Project Name: KCR

Project Location: 7100 Herndon, VA

Sample ID: 001

Date/Time Sampled: 02/16/2011 15:00 PSS Sample ID: 11021711-001

Matrix: WATER

Date/Time Received: 02/17/2011 13:15

Purgeable Aromatics

Analytical Method: SW-846 8021B

Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Benzene	ND	ug/L	1		1	02/18/11	02/18/11 15:57	1035
Toluene	ND	ug/L	1		1	02/18/11	02/18/11 15:57	1035
Ethylbenzene	ND	ug/L	1		1	02/18/11	02/18/11 15:57	1035
m,p-Xylenes	ND	ug/L	2		1	02/18/11	02/18/11 15:57	1035
o-Xylene	ND	ug/L	1		1	02/18/11	02/18/11 15:57	1035
Methyl-t-butyl ether	ND	ug/L	1		1	02/18/11	02/18/11 15:57	1035
Naphthalene	2	ug/L	1		1	02/18/11	02/18/11 15:57	1035

Sample ID: 002

Date/Time Sampled: 02/16/2011 15:00 PSS Sample ID: 11021711-002

Matrix: WATER

Date/Time Received: 02/17/2011 13:15

Diesel/Oil Range Organics

Analytical Method: SW-846 8015 C

Preparation Method: 3510C

DF/HF - No. 2/diesel fuel and heavier fuel/oil patterns observed in sample.

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO/ORO (Diesel/Oil Range Organics)	8	mg/L	1	DF	10	02/21/11	02/21/11 14:32	1040

OFFICES:  
6630 BALTIMORE NATIONAL PIKE  
ROUTE 40 WEST  
BALTIMORE, MD 21228  
410-747-8770  
800-932-9047  
FAX 410-788-8723

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 11021711

Atlas Environmental Services, LLC, Lorton, VA

February 24, 2011

Project Name: KCR

Project Location: 7100 Herndon, VA

Sample ID: 003

Date/Time Sampled: 02/16/2011 15:00

PSS Sample ID: 11021711-003

Matrix: SOIL

Date/Time Received: 02/17/2011 13:15

% Solids: 65

Total Metals

Analytical Method: SW-846 6020 A

Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Arsenic	2.5	mg/kg	0.6		1	02/17/11	02/18/11 15:50	1033
Barium	82	mg/kg	2.9		1	02/17/11	02/18/11 15:50	1033
Cadmium	ND	mg/kg	2.9		1	02/17/11	02/18/11 15:50	1033
Chromium	34	mg/kg	2.9		1	02/17/11	02/18/11 15:50	1033
Lead	9.4	mg/kg	2.9		1	02/17/11	02/18/11 15:50	1033
Mercury	ND	mg/kg	0.12		1	02/17/11	02/18/11 15:50	1033
Selenium	ND	mg/kg	2.9		1	02/17/11	02/18/11 15:50	1033
Silver	ND	mg/kg	2.9		1	02/17/11	02/18/11 15:50	1033

Total Petroleum Hydrocarbons - DRO

Analytical Method: SW-846 8015 C

Preparation Method: 3550

DF/HF - No. 2/diesel fuel and heavier fuel/oil patterns observed in sample.

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	300	mg/kg	6	DF	1	02/21/11	02/21/11 19:27	1040

Purgeable Aromatics

Analytical Method: SW-846 8021B

Preparation Method: 5030

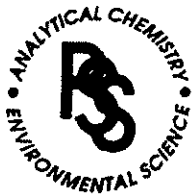
	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Benzene	ND	ug/kg	2		1	02/17/11	02/17/11 16:27	1035
Toluene	ND	ug/kg	2		1	02/17/11	02/17/11 16:27	1035
Ethylbenzene	ND	ug/kg	2		1	02/17/11	02/17/11 16:27	1035
m,p-Xylenes	ND	ug/kg	3		1	02/17/11	02/17/11 16:27	1035
o-Xylene	ND	ug/kg	2		1	02/17/11	02/17/11 16:27	1035

Total Organic Halides (TOX)

Analytical Method: SW-846 9078

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Total Organic Halides (TOX)	ND	mg/kg	77		1	02/22/11	02/22/11 16:54	1022





# SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

www.phaseonline.com  
email: info@phaseonline.com

<b>1</b> CLIENT: <u>ATLAS ENV.</u> OFFICE LOC: <u>Lorton, VA</u>		PSS Work Order #: <u>11021711</u>		PAGE <u>1</u> OF <u>1</u>																																																													
PROJECT MGR: <u>PAUL STUCKLIN</u> PHONE NO.: <u>(703) 339 9730</u>		Matrix Codes: SW=Surface Wtr DW=Drinking Wtr GW=Ground Wtr WW=Waste Wtr O=Oil S=Soil WL=Waste Liquid WS=Waste Solid W= Wipe																																																															
EMAIL: <u>PAUL@ATLASONTHEWEB.COM</u> FAX NO.: <u>( )</u>		<table border="1"><tr><td rowspan="4">No. CONTAINERS</td><td rowspan="4">SAMPLE TYPE</td><td rowspan="4">C = COMP G = GRAB</td><td colspan="10">Preservatives Used</td><td rowspan="4">REMARKS</td></tr><tr><td>HEX</td><td>HCL</td><td>HCL</td><td>HCL</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td></td><td></td></tr><tr><td>Analysis/Method Required</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>				No. CONTAINERS	SAMPLE TYPE	C = COMP G = GRAB	Preservatives Used										REMARKS	HEX	HCL	HCL	HCL	N/A	N/A	N/A	N/A			Analysis/Method Required																																			
No. CONTAINERS	SAMPLE TYPE								C = COMP G = GRAB	Preservatives Used										REMARKS																																													
										HEX	HCL	HCL	HCL	N/A	N/A	N/A	N/A																																																
										Analysis/Method Required																																																							
PROJECT NAME: <u>KCR</u> PROJECT NO.: <u></u>																																																																	
SITE LOCATION: <u>7100, HERRINGTON, VA</u> P.O. NO.: <u></u>																																																																	
SAMPLERS: <u>ADD</u>																																																																	
<b>2</b>																																																																	
LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX (See Codes)																																																													
001		2/16	3:00pm	Water	2 <u>B</u>																																																												
002		2/16	3:00pm	Water	1 <u>G</u>																																																												
003		2/16	3:00pm	Soil	2 <u>C</u>																																																												
<b>3</b>																																																																	
<table border="1"><tr><td>Analysis/Method Required</td><td>HEX</td><td>HCL</td><td>HCL</td><td>HCL</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td>X</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>						Analysis/Method Required	HEX	HCL	HCL	HCL	N/A	N/A	N/A	N/A								X	X	X																X																X	X	X	X						
Analysis/Method Required	HEX	HCL	HCL	HCL	N/A	N/A	N/A	N/A																																																									
	X	X	X																																																														
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					X	X	X	X																																																									
<b>4</b>																																																																	
Relinquished By: (1) <u>[Signature]</u>		Date: <u>2/16</u>	Time: <u>3:00pm</u>	Received By: <u>[Signature]</u>																																																													
Relinquished By: (2) <u>[Signature]</u>		Date: <u>2/17/11</u>	Time: <u>115</u>	Received By: <u>Sara D</u>																																																													
Relinquished By: (3)		Date	Time	Received By:																																																													
Relinquished By: (4)		Date	Time	Received By:																																																													
<b>5</b>																																																																	
Requested Turnaround Time <input type="checkbox"/> 5-Day <input type="checkbox"/> 3-Day <input type="checkbox"/> 2-Day <input type="checkbox"/> Next Day <input type="checkbox"/> Emergency <input type="checkbox"/> Other																																																																	
Data Deliverables Required:																																																																	
Special Instructions: <u>Hydraulic oil impacted water</u> <u>&amp; Soil - Standard TAT</u>																																																																	
Ice Present: <u>YES</u> Temp: <u>0</u>																																																																	
Shipping Carrier: <u>DAL</u>																																																																	

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable fees if collection becomes necessary.



# Phase Separation Science, Inc

## Sample Receipt Checklist

Work Order #	11021711	Received By	Sara Dorr
Client Name	Atlas Environmental Services, LLC	Date Received	02/17/2011 01:15:00 PM
Project Name	KCR	Delivered By	Dial Courier
Project Number	N/A	Tracking No	Not Applicable
Disposal Date	03/24/2011	Logged In By	Sara Dorr

### Shipping Container(s)

No. of Coolers	1	Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	0
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No

### Documentation

COC agrees with sample labels?	Yes
Chain of Custody	Yes

Sampler Name	<u>Paul Stoecklin</u>
MD DW Cert. No.	<u>N/A</u>

### Sample Container

Appropriate for Specified Analysis?	Yes
Intact?	Yes
Labeled and Labels Legible?	Yes

Custody Seal(s) Intact?	Not Applicable
Seal(s) Signed / Dated	Not Applicable

Total No. of Samples Received 3

Total No. of Containers Received 5

### Preservation

Metals	(pH<2)	N/A
Cyanides	(pH>12)	N/A
Sulfide	(pH>9)	N/A
TOC, COD, Phenols	(pH<2)	N/A
TOX, TKN, NH3, Total Phos	(pH<2)	N/A
VOC, BTEX (VOA Vials Rcvd Preserved)	(pH<2)	Yes
Do VOA vials have zero headspace?		Yes

### Comments: (Any "No" response must be detailed in the comments section below.)

For any improper preservation conditions, list sample ID, preservative added (reagent ID number) below as well as documentation of any client notification as well as client instructions. Samples for pH, chlorine and dissolved oxygen should be analyzed as soon as possible, preferably in the field at the time of sampling. Samples which require thermal preservation shall be considered acceptable when received at a temperature above freezing to 6°C. Samples that are hand delivered on the day that they are collected may not meet these criteria but shall be considered acceptable if there is evidence that the chilling process has begun such as arrival on ice.

Samples Inspected/Checklist Completed By:

Sara Dorr

Date: 02/17/2011

PM Review and Approval:

Simon Crisp

Date: 02/17/2011

# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

## SHIPPING DOCUMENT

Date: Document# **A 010039**

Generator / Shipper: <b>KCR JOINT VENTURE</b>	
US EPA ID#:	
Address: <b>11654 Plaza America Dr #177</b>	
City: <b>Reston</b>	State: <b>VA</b>
Zip: <b>20190</b>	
Contact: <b>Jim Foley</b>	Phone: <b>216-409-3416</b>
Site: <b>CONSTRUCTION SITE</b>	
Address: <b>RE 7100 AT WOOD TRAIL</b>	
City: <b>Reston</b>	State: <b>VA</b>
Zip:	
Transporter No. 1: <b>Atlas Environmental Svcs</b>	
US EPA ID #:	Phone: <b>703-339-9770</b>
Transporter No. 2: <b>ATLAS</b>	
US EPA ID #:	Phone:
Facility: <input checked="" type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079 <input type="checkbox"/> Other:	
Additional Information:  24 Hour Emergency Phone Number 703-339-9770	

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
1	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
	Sorbents, Oil
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5, or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	00177	265	G	265			
2	00456	200	P		9		
3							
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name: <b>Jim Foley</b>	Signature: 	Month / Day / Year: <b>01/19/11</b>
Transporter 1 Acknowledgement of Receipt of Materials		
Type / Print Name: <b>Dr. Hartman</b>	Signature: 	Month / Day / Year: <b>1/19/11</b>
Transporter 2 Acknowledgement of Receipt of Materials		
Type / Print Name:	Signature:	Month / Day / Year:
Discrepancy Indication Space		
Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above.		
Type / Print Name: <b>PAUL SPECKLER</b>	Signature: 	Month / Day / Year: <b>1/19/11</b>





# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

Date: 1/21/11 Document # A 008236

Generator/ Shipper: <b>ECR JV</b>		
US EPA ID#:		
Address:		
City:	State:	Zip:
Contact:	Phone:	
Site: <b>Const. Site</b>		
Address: <b>7100 Dulles Toll Rd</b>		
City:	State:	Zip:
Transporter No. 1: <b>ATLAS ENVIRONMENTAL</b>		
US EPA ID#:	Phone:	
Transporter No. 2:		
US EPA ID#:	Phone:	
Facility: <b>Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079</b>		
<input type="checkbox"/> Other:		
Additional Information:		
24 Hour Emergency Phone Number 703-339-9770		

## SHIPPING DOCUMENT

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water/Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
2	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Materials, Solids

Line	Material
	Ash, Fly
	Debris, C&D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
1	Sorbents, Oil
	Other

### DOT Regulated/Non RCRA Materials-Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No.1,2,4,5, or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers		Total Quantity	Unit Wt./Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
	No.	Type						
1	1	BGS	15	lbs				
2	1	II	193	GAL	193			
3								
4								
5								
6								

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type/Print Name: **[Signature]** Signature: **[Signature]** Month/ Day/ Year:

Transporter 1 Acknowledgement of Receipt of Materials

Type/Print Name: **D.J. Hartman** Signature: **[Signature]** Month/ Day/ Year: **1/21/11**

Transporter 2 Acknowledgement of Receipt of Materials

Type/Print Name: Signature: Month/ Day/ Year

Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy area above.

Type/Print Name: **Paul Stocill** Signature: **[Signature]** Month/ Day/ Year: **1/21/2011**



# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

Date: 1/24/11 Document# **A 009911**

Generator/Shipper: <u>PER Joni Verrano</u>			
US EPA ID#:			
Address:			
City:	State:	Zip:	
Contact:	Phone:		
Site: <u>CONST.</u>			
Address: <u>7100 DULLES TR</u>			
City: <u>LESTON</u>	State: <u>VA</u>	Zip:	
Transporter No. 1: <u>ATLAS ENVIRONMENTAL</u>			
US EPA ID #:		Phone:	
Transporter No. 2:			
US EPA ID #:		Phone:	
Facility:			
<input checked="" type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079			
<input type="checkbox"/> Other:			
Additional Information:			
24 Hour Emergency Phone Number 703-339-9770			

## SHIPPING DOCUMENT

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
<u>1</u>	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
<u>2</u>	Soil, Oil
	Sorbents, Diesel Fuel
	Sorbents, Oil
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5, or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	<u>1</u> <u>711</u>	<u>27</u>	<u>GAL</u>				
2	<u>2</u> <u>144</u>	<u>40</u>					
3							
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name: <u>Michael F. Verrano</u>	Signature: <u>[Signature]</u>	Month / Day / Year: <u>1/24/11</u>
Transporter 1 Acknowledgement of Receipt of Materials		
Type / Print Name: <u>Debra Ann</u>	Signature: <u>[Signature]</u>	Month / Day / Year: <u>1/24/11</u>
Transporter 2 Acknowledgement of Receipt of Materials		
Type / Print Name:	Signature:	Month / Day / Year:

Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above.

Type / Print Name: <u>Ann Staelen</u>	Signature: <u>[Signature]</u>	Month / Day / Year: <u>1/24/11</u>
---------------------------------------	-------------------------------	------------------------------------



# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

## SHIPPING DOCUMENT

Date: 1/26/11 Document# A 009909

Generator / Shipper: KCR Joint Venture		
US EPA ID#:		
Address: Rt 7100		
City: Reston	State: VA	Zip:
Contact:	Phone:	
Site: CONSTRUCTION SITE		
Address: Rt 7100		
City: Reston	State: VA	Zip:
Transporter No. 1: ATLAS ENV. SVCS		
US EPA ID #:	Phone:	
Transporter No. 2:		
US EPA ID #:	Phone:	
Facility: <input checked="" type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079 <input type="checkbox"/> Other:		
Additional Information:  24 Hour Emergency Phone Number 703-339-9770		

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Material, Solids



Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
1	Sorbents, Oil
	Other

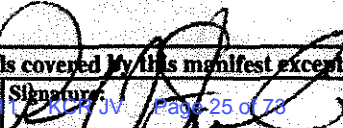
### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5,or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	001 BN	100	P	-	2	-	
2							
3							
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name: Matthew T. Con	Signature: 	Month / Day / Year 1/26/11
Transporter 1 Acknowledgement of Receipt of Materials		
Type / Print Name: Matthew T. Con	Signature: 	Month / Day / Year 1/26/11
Transporter 2 Acknowledgement of Receipt of Materials		
Type / Print Name:	Signature:	Month / Day / Year

Discrepancy Indication Space		
Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above.		
Type / Print Name: TALL SPECULI	Signature: 	Month / Day / Year 1/26/11

# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

Date: 1/23/11 Document# A 009912

Generator / Shipper: KCR Joint Venture		
US EPA ID#:		
Address:		
City:	State:	Zip:
Contact:	Phone:	
Site: CONST. SITE		
Address: 7100 DOLLARD RD		
City:	State:	Zip:
Transporter No. 1:	ATLAS ENVIRONMENTAL	
US EPA ID #:	Phone:	
Transporter No. 2:		
US EPA ID #:	Phone:	
Facility:		
<input checked="" type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079		
<input type="checkbox"/> Other:		
Additional Information:		
24 Hour Emergency Phone Number 703-339-9770		

## SHIPPING DOCUMENT

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
1	Sorbents, Oil
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5, or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	3 019	60					
2							
3		2				2	
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name: ADRIAN F. GONZALEZ Signature: [Signature] Month / Day / Year: 1/23/11

#### Transporter 1 Acknowledgement of Receipt of Materials

Type / Print Name: [Signature] Signature: [Signature] Month / Day / Year: 1/23/11

#### Transporter 2 Acknowledgement of Receipt of Materials

Type / Print Name: Signature: Month / Day / Year:

#### Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above.

Type / Print Name: ADRIAN SPECILLI Signature: [Signature] Month / Day / Year: 1/23/11



# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

Date: 2/2/11 Document # A 009445

Generator/ Shipper:		
US EPA ID#:		
Address:		
City:	State:	Zip:
Contact:	Phone:	
Site:		
Address:		
City:	State:	Zip:
Transporter No. 1:		
US EPA ID#:		
Transporter No. 2:		
US EPA ID#:		
Facility:		
Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079		
<input type="checkbox"/> Other:		
Additional Information:		
24 Hour Emergency Phone Number 703-339-9770		

## SHIPPING DOCUMENT

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water/Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
1	Oil, Water for Recycling
	Wastewaters

### Non RCRA/ Non DOT Regulated Materials, Solids

Line	Material
	Ash, Fly
	Debris, C&D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
1	Sorbents, Oil
	Other

### DOT Regulated/Non RCRA Materials-Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1, 2, 4, 5, or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers		Total Quantity	Unit Wt./Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
	No.	Type						
1	1	PT	51	SAC				
2	6	PAS	120	lbs				
3								
4								
5								
6								

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type/Print Name:	Signature:	Month/ Day/ Year:
NGMT FOR CLOUTIER	[Signature]	2/2/11
Transporter 1 Acknowledgement of Receipt of Materials		
Type/Print Name:	Signature:	Month/ Day/ Year:
[Signature]	[Signature]	2/2/11
Transporter 2 Acknowledgement of Receipt of Materials		
Type/Print Name:	Signature:	Month/ Day/ Year:
Discrepancy Indication Space		

Facility Owner or Operator : Certification of receipt of materials covered by this manifest except as noted in Discrepancy area above.

Type/Print Name:	Signature:	Month/ Day/ Year:
PAUL STOECKLIN	[Signature]	2/2/11



# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

Date: 7 FEB 11 Document # **A 008700**

Generator/Shipper: <u>KCR Joint Venture</u>		
US EPA ID#:		
Address:		
City:	State:	Zip:
Contact:	Phone:	
Site: <u>7100 at Dulles Toll Rd Construction site</u>		
Address:		
City: <u>RESTON</u>	State: <u>VA</u>	Zip:
Transporter No. 1: <u>Atlas Environmental Services</u>		
US EPA ID#:	Phone: <u>703-339-9771</u>	
Transporter No. 2:		
US EPA ID#:	Phone:	
Facility: <input checked="" type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079 <input type="checkbox"/> Other:		
Additional Information:  24 Hour Emergency Phone Number 703-339-9770		

## SHIPPING DOCUMENT

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water/Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
<u>1</u>	Oil, Water for Recycling
<u>2</u>	Wastewaters

### Non RCRA/ Non DOT Regulated Materials, Solids

Line	Material
	Ash, Fly
	Debris, C&D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
<u>2</u>	Sorbents, Oil
	Other

### DOT Regulated/Non RCRA Materials-Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No.1,2,4,5, or 6) 3, NA 1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers		Total Quantity	Unit Wt./Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
	No.	Type						
1	<u>1</u>	<u>TT</u>	<u>600</u>	<u>GALLONS</u>	<u>600</u>	<u>0</u>	<u>0</u>	
2	<u>6</u>	<u>Bag</u>	<u>6</u>	<u>Bag</u>				
3								
4								
5								
6								

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type/Print Name: Agent for Generator Signature: \_\_\_\_\_ Month/ Day/ Year: 2/7/11

Transporter 1 Acknowledgement of Receipt of Materials

Type/Print Name: DOWELL JASON Signature: Jason Dowell Month/ Day/ Year: 2/7/2011

Transporter 2 Acknowledgement of Receipt of Materials

Type/Print Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Month/ Day/ Year: \_\_\_\_\_

Discrepancy Indication Space

Facility Owner or Operator Certification of receipt of materials covered by this manifest except as noted in Discrepancy area above.

Type/Print Name: Paul J. Spach Signature: Paul J. Spach Month/ Day/ Year: 2/7/2011

# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

## SHIPPING DOCUMENT

Date: \_\_\_\_\_ Document# **A 010042**

Generator / Shipper: <i>KCR Tuent Venture</i>		
US EPA ID#:		
Address:		
City:	State:	Zip:
Contact:	Phone:	
Site: <i>Oil Spill Site</i>		
Address: <i>127100 W. O.D. Tron</i>		
City:	State:	Zip:
Transporter No. 1:	<i>Atlas Env. Serv</i>	
US EPA ID #:	Phone: <i>703-339-9770</i>	
Transporter No. 2:		
US EPA ID #:	Phone:	
Facility: <input checked="" type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079 <input type="checkbox"/> Other:		
Additional Information:  24 Hour Emergency Phone Number 703-339-9770		

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
<i>2</i>	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
<i>1</i>	Sorbents, Oil
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5,or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	<i>004 BA</i>	<i>100</i>	<i>P</i>	<i>-</i>	<i>100</i>		
2	<i>001 TT</i>	<i>115</i>	<i>G</i>	<i>115</i>			
3							
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name: <i>KASSOU F</i>	Signature: <i>[Signature]</i>	Month / Day / Year: <i>2/10/2011</i>
Transporter 1 Acknowledgement of Receipt of Materials		
Type / Print Name: <i>Dowell JASON</i>	Signature: <i>[Signature]</i>	Month / Day / Year: <i>FEB 10 2011</i>
Transporter 2 Acknowledgement of Receipt of Materials		
Type / Print Name:	Signature:	Month / Day / Year:

Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above.

Type / Print Name: <i>PAUL STICKLER</i>	Signature: <i>[Signature]</i>	Month / Day / Year: <i>2/10/11</i>
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# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

## SHIPPING DOCUMENT

Date: 2/14/11 Document# A 009848

Generator / Shipper: KCA		
US EPA ID#:		
Address:		
City:	State:	Zip:
Contact:		Phone:
Site: Const. Site		
Address: 7100/247		
City:	State:	Zip:
Transporter No. 1: <i>ATLAS Environmental Services, LLC</i>		
US EPA ID #:		Phone:
Transporter No. 2:		
US EPA ID #:		Phone:
Facility: <input type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079 <input type="checkbox"/> Other:		
Additional Information:  24 Hour Emergency Phone Number 703-339-9770		

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
1	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
2	Sorbents, Oil
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5,or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	1 TI	5AL	71				
2	7 BAG	165	140				
3							
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name: <i>John Flynn</i>	Signature: <i>[Signature]</i>	Month / Day / Year
Transporter 1 Acknowledgement of Receipt of Materials		
Type / Print Name: <i>John Flynn</i>	Signature: <i>[Signature]</i>	Month / Day / Year 2/14/11
Transporter 2 Acknowledgement of Receipt of Materials		
Type / Print Name:	Signature:	Month / Day / Year
Discrepancy Indication Space		
Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above.		
Type / Print Name: <i>John Flynn</i>	Signature: <i>[Signature]</i>	Month / Day / Year 2/14/11



# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

## SHIPPING DOCUMENT

Date: 2/17/11 Document# A 009920

Generator / Shipper: <i>KOR</i>		
US EPA ID#:		
Address:		
City:	State:	Zip:
Contact:		Phone:
Site: <i>CONST. SITE</i>		
Address: <i>7100/200</i>		
City: <i>Reston</i>	State: <i>VA</i>	Zip:
Transporter No. 1: <i>ATLAS ENVIRONMENTAL</i>		
US EPA ID #:		Phone:
Transporter No. 2:		
US EPA ID #:		Phone:
Facility: <input checked="" type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079 <input type="checkbox"/> Other:		
Additional Information:		
24 Hour Emergency Phone Number 703-339-9770		

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
1	Sorbents, Oil
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5,or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	4 GAS	100	lbs				
2							
3							
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name: <i>Jim Foley</i>	Signature: <i>[Signature]</i>	Month / Day / Year
Transporter 1 Acknowledgement of Receipt of Materials		
Type / Print Name: <i>Serman L. Loo</i>	Signature: <i>[Signature]</i>	Month / Day / Year: <i>2/17/11</i>
Transporter 2 Acknowledgement of Receipt of Materials		
Type / Print Name:	Signature:	Month / Day / Year

Discrepancy Indication Space		
Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above.		
Type / Print Name: <i>Paul Sorensen</i>	Signature: <i>[Signature]</i>	Month / Day / Year: <i>2/17/11</i>

# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

## SHIPPING DOCUMENT

Date: 2/22/11 Document# A 009846

Generator / Shipper: KCR		
US EPA ID#:		
Address:		
City:	State:	Zip:
Contact:	Phone:	
Site: CONST. SITE		
Address: 7100/267		
City:	State:	Zip:
Transporter No. 1: ATLAS ENVIRONMENTAL		
US EPA ID#:	Phone:	
Transporter No. 2:		
US EPA ID#:	Phone:	
Facility:		
<input type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079 <input type="checkbox"/> Other:		
Additional Information:		
24 Hour Emergency Phone Number 703-339-9770		

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
1	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
1	Sorbents, Oil
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5,or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	1 TT	56	GAL				
2	3 BAGS	60	lbs				
3							
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name:	Signature:	Month / Day / Year
Transporter 1 Acknowledgement of Receipt of Materials		
Type / Print Name:	Signature:	Month / Day / Year
Transporter 2 Acknowledgement of Receipt of Materials		
Type / Print Name:	Signature:	Month / Day / Year
Discrepancy Indication Space		
Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above.		
Type / Print Name:	Signature:	Month / Day / Year



# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

## SHIPPING DOCUMENT

Date: **25 FEB 11** Document# **A 009775**

Generator / Shipper: <b>KCR</b>		
US EPA ID#: <b>NOT REQUIRED</b>		
Address: <b>1100 FAIRFAX CO PKWY</b>		
City: <b>RESTON</b>	State: <b>VA</b>	Zip:
Contact:	Phone:	
Site: <b>SAME AS ABOVE</b>		
Address:		
City:	State:	Zip:
Transporter No. 1: <b>ATLAS ENVIRONMENTAL</b>		
US EPA ID #: <b>NOT REQUIRED</b> Phone: <b>703-339-9770</b>		
Transporter No. 2:		
US EPA ID #: Phone:		
Facility:		
<input checked="" type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079		
<input type="checkbox"/> Other:		
Additional Information: <b>#24</b>		
24 Hour Emergency Phone Number 703-339-9770		

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
1	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
	Sorbents, Oil
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5, or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	1 11	3385	GAL	3385	—	—	
2							
3							
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name: <b>Joe Dwyer</b>	Signature:	Month / Day / Year: <b>2/25/11</b>
Transporter 1 Acknowledgement of Receipt of Materials		
Type / Print Name: <b>DAVID FOUST</b>	Signature:	Month / Day / Year: <b>2/25/11</b>
Transporter 2 Acknowledgement of Receipt of Materials		
Type / Print Name:	Signature:	Month / Day / Year:
Discrepancy Indication Space		
Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above.		
Type / Print Name: <b>Jan Stoeck</b>	Signature:	Month / Day / Year: <b>2/25/11</b>



# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

## SHIPPING DOCUMENT

Date: 2-25-11 - Document# **A** 009805

Generator / Shipper:

KCR

US EPA ID#:

Not Required

Address:

City:

State:

Zip:

Contact:

Phone:

Site:

Water main construction site

Address:

Farmington City PLwy + Elmore St.

City:

State:

Zip:

Reston

VA

Transporter No. 1:

Atlas Environmental

US EPA ID#:

Not Req

Phone:

703-339-9770

Transporter No. 2:

US EPA ID#:

Phone:

Facility:

☒ Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079

☐ Other:

Additional Information:

W21

24 Hour Emergency Phone Number  
703-339-9770

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
	Sorbents, Oil
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5,or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers		Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
	No.	Type						
1	<u>ONE</u>	<u>55</u>	<u>2150</u>	<u>GALON</u>	<u>2150</u>			
2								
3								
4								
5								
6								

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name:

Joe Watson

Signature:

[Signature]

Month / Day / Year

Transporter 1 Acknowledgement of Receipt of Materials

Type / Print Name:

Don Hennessey

Signature:

[Signature]

Month / Day / Year

2-25-11

Transporter 2 Acknowledgement of Receipt of Materials

Type / Print Name:

Signature:

Month / Day / Year

Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above.

Type / Print Name:

Jim Gosnell

Signature:

[Signature]

Month / Day / Year

4/25/11



# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

## SHIPPING DOCUMENT

Date: Document# **A 009993**

Generator / Shipper: <b>KCR</b>		
US EPA ID#: <b>NOT REQUIRED</b>		
Address: <b>Rt 7100 @ Old Trail</b>		
City:	State:	Zip:
Contact:		Phone:
Site:		
Address:		
City:	State:	Zip:
Transporter No. 1: <b>Atlas Environmental Services</b>		
US EPA ID #: <b>NOT REQUIRED</b>		Phone: <b>703 339 9771</b>
Transporter No. 2:		
US EPA ID #:		Phone:
Facility:		
<input type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079 <input type="checkbox"/> Other:		
Additional Information:		
24 Hour Emergency Phone Number 703-339-9770		

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
<b>1</b>	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
	Sorbents, Oil
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5,or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	1 TT	1000	GALLONS	1000	—	—	
2							
3							
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name: <b>Jared Lente</b>	Signature:	Month / Day / Year: <b>2-25-11</b>
Transporter 1 Acknowledgement of Receipt of Materials		
Type / Print Name: <b>DOWELL JASON</b>	Signature:	Month / Day / Year: <b>FEB 25 2011</b>
Transporter 2 Acknowledgement of Receipt of Materials		
Type / Print Name:	Signature:	Month / Day / Year:
Discrepancy Indication Space		
Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above.		
Type / Print Name: <b>Jim Sperry</b>	Signature:	Month / Day / Year: <b>4-25-2011</b>

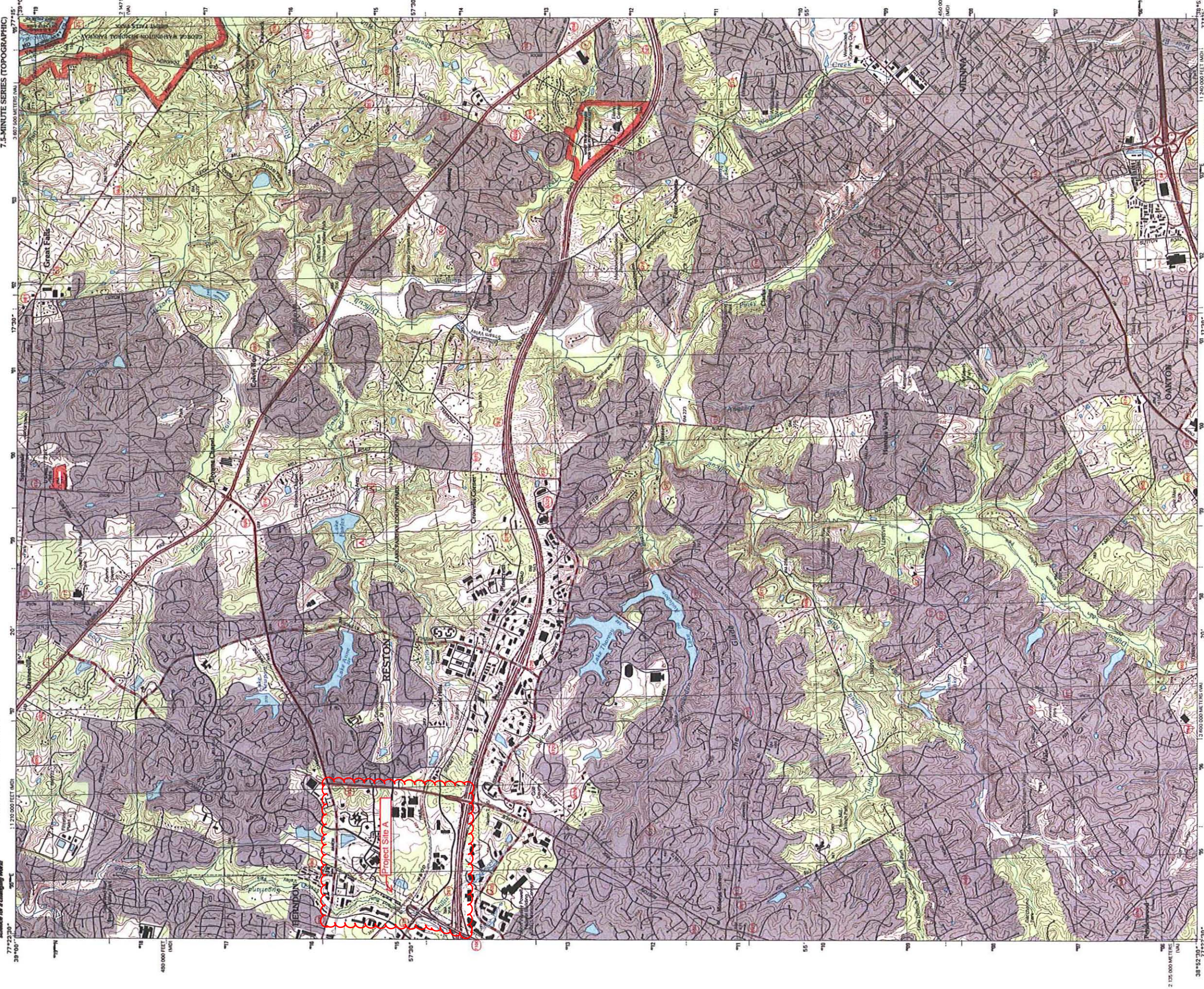
# USGS Maps



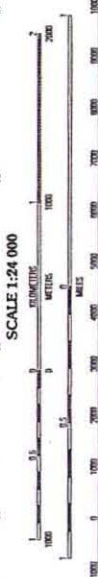


U.S. DEPARTMENT OF THE INTERIOR  
U.S. GEOLOGICAL SURVEY

VIENNA QUADRANGLE  
VIRGINIA-MARYLAND  
7.5-MINUTE SERIES (TOPOGRAPHIC)



Produced by the United States Geological Survey  
Topography compiled 1949. Photometry derived from imagery  
taken 1994. Survey control current as of 1991. Contours  
are based on the 1985 datum. The map is based on the  
North American datum of 1983 (NAD 83). The map is  
based on the 1985 datum. The map is based on the  
1985 datum. The map is based on the 1985 datum.  
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1985 datum. The map is based on the 1985 datum.



CONTOUR INTERVAL 10 FEET  
NATIONAL GEODETIC VERTICAL DATUM OF 1989  
TO CONVERT FROM FEET TO METERS, MULTIPLY BY 0.3048  
FOR SALE BY U.S. GEOLOGICAL SURVEY, P.O. BOX 2586, DENVER, COLORADO 80225  
AND VIRGINIA DIVISION OF MINERAL RESOURCES, CHARLOTTESVILLE, VIRGINIA 22903  
A POLAR PROJECTION TOPOGRAPHIC MAP AND SYMBOLS IS AVAILABLE ON REQUEST

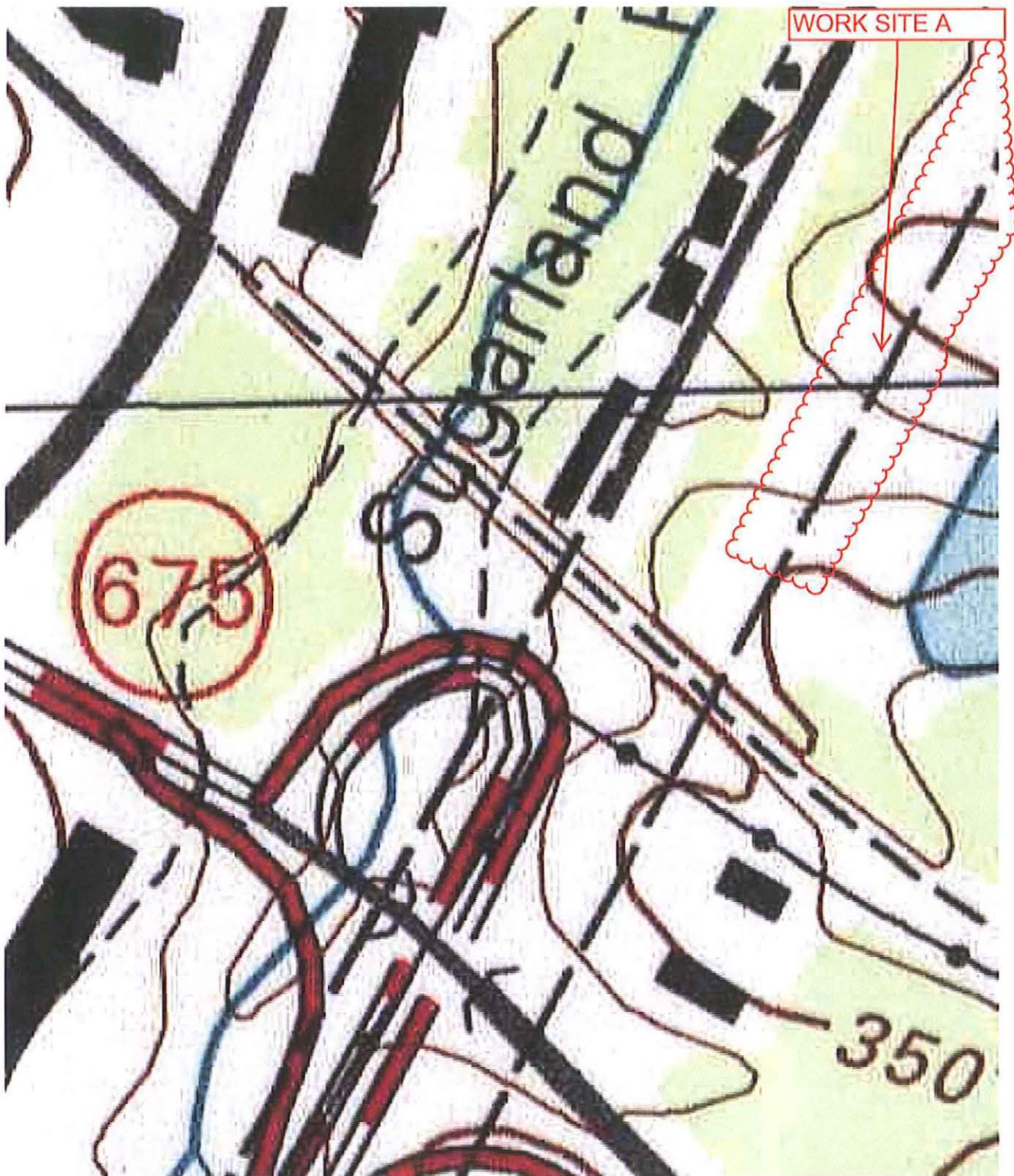


1	2	3
1	2	3
4	5	6
7	8	9

ROAD CLASSIFICATION  
Primary highway  
Light-duty road, hard or  
improved surface  
Unimproved road  
Interstate Route  
U.S. Route  
State Route

VIENNA, VA-MD  
1994  
NIMA 5561 1V NC-SERIES VERA

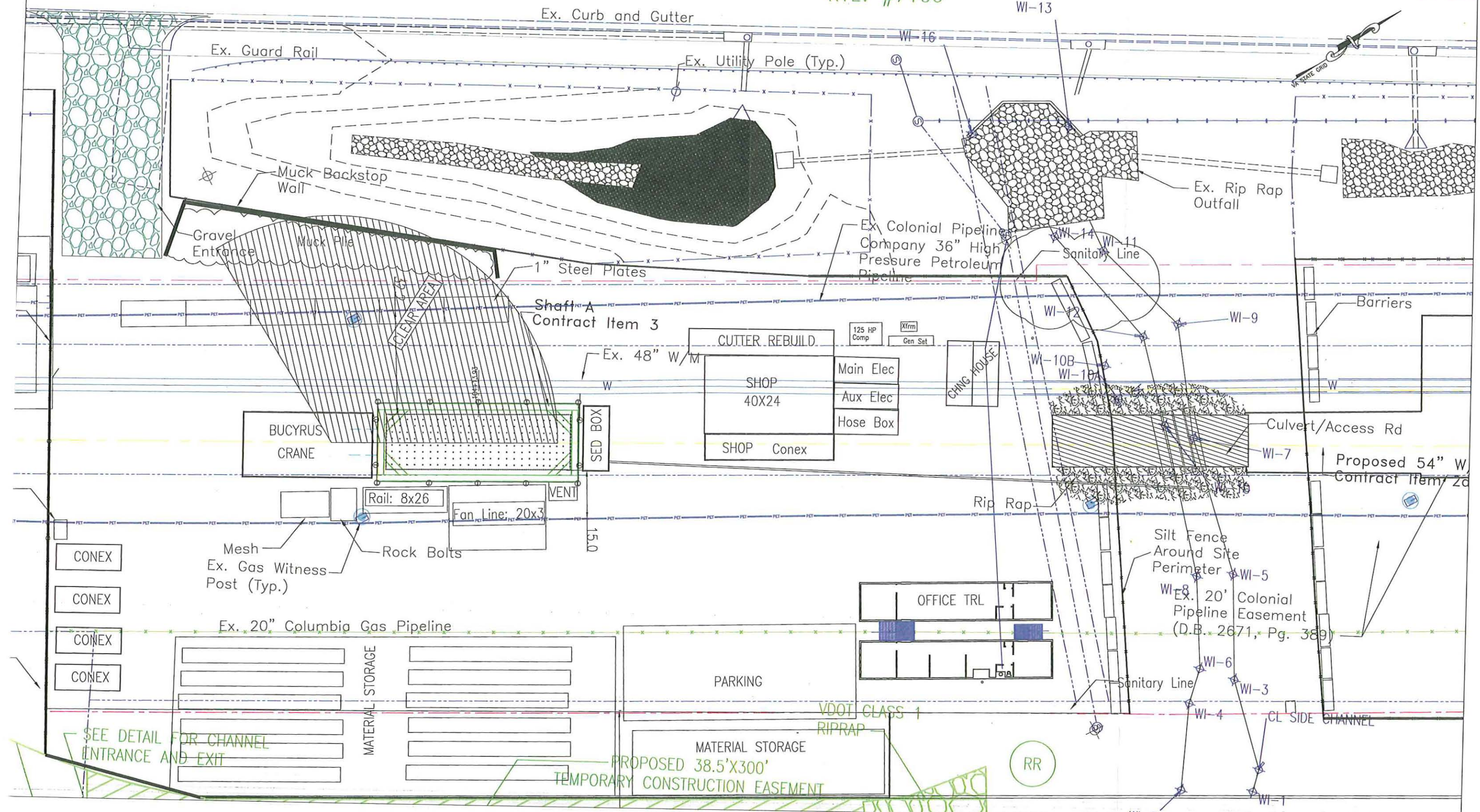




SOUTH EAST CORNER OF FAIRFAX  
COUNTY PARKWAY AND NEW DOMINION  
PARKWAY IN RESTON VIRGINIA 20190

# Site Diagram



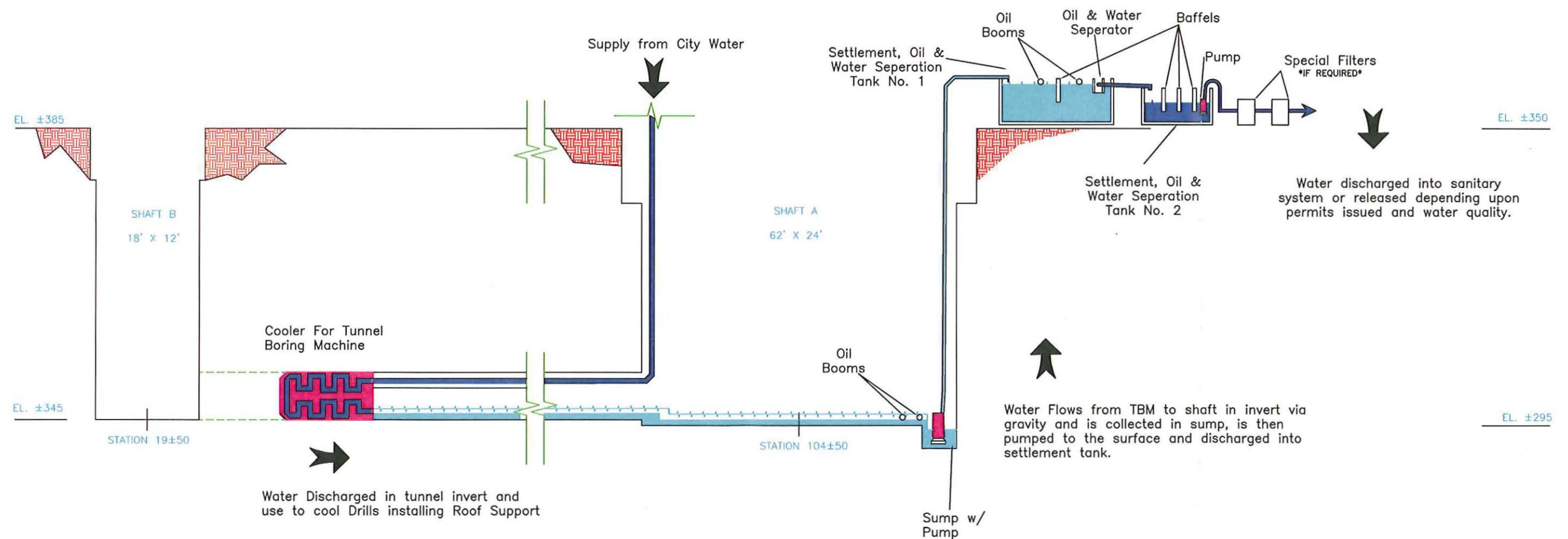




# Treatment System Diagram



# Proposed Onsite Water/Oil Remediation Plan



# **Site Material Safety Data Sheets (MSDS)**

**SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION.****D-A Lubricant**

1340 W. 29th St.  
Indianapolis, IN 46208  
317/923-5321

CHEMICAL EMERGENCY HOTLINE 800 899-9004

PRODUCT NAME: **ROCK DRILL, ALL GRADES**

PRODUCT DESCRIPTION: ROCK DRILL, ALL GRADES

CHEMICAL FAMILY: PETROLEUM OIL, MACHINE OIL

EFFECTIVE DATE: 02/19/08

SUPERCEDES DATE: 03/02/05

Dear Customer:

In compliance with the Superfund Amendments and Reauthorization Act (SARA Title III, Section 313), Federal Hazard Communications Regulations (WHMIS and OSHA 29 CFR 1910.1200) and in the interest of informed use of our product, we are providing you with this Material Safety Data Sheet (MSDS).

This MSDS will be updated regularly to reflect the most recent information in our possession. Please ensure that obsolete MSDS sheets in your files for this part number are discarded.

We THANK YOU for your continued patronage and look forward to providing you with additional quality products and services.

**SECTION 2 - HAZARDOUS INGREDIENTS**

COMPONENT	CAS #	% WT	PEL	TLV	STEL	UNITS	LC50, PPM	LD50, MG/KG
PETROLEUM OILS								
	64742-65-0	60-99	5	5	10	MG/M3	RATI 13000	RABA 2000
	64741-88-4	60-99	5	5	10	MG/M3	RATI 13000	RABA 2000
	64742-01-4	60-99	5	5	10	MG/M3	RATI 13000	RABA 2000
		60-99						
PETROLEUM OILS								
	64741-89-5	60-99	5	5		MG/M3	RATI 13000	RABA 2000

**SECTION 3 - PHYSICAL DATA**

Boiling Pt Deg F/C: >500/>260	Specific Gravity: 0.86 to 0.90
Vapor Pressure (MM HG): NIL	% Volatile Volume: NIL
Vapor Density (Air=1): N/A	Evaporation Rate: <0.1
Solubility in Water: NEGLIGIBLE	Water/Oil Dist Coeff: 0
Appearance and Odor: Amber Liquid with Mild Petroleum Odor	
Physical State: Liquid	PH: N/A
Freeze Pt Deg F/C: N/A	Threshold Odor, PPM: N/A
Other: N/A	VOC: Lbs/Gal = N/A
Grams/Liter = N/A	Grams Vol/Gram Solid = N/A
% VOC: N/A	

**SECTION 4 - FIRE AND EXPLOSION HAZARD DATA**

Classification: Combustible at high temp NFPA Rating: 1.1.0  
 Combustion products: CO, CO2, Smoke, Sulfur, Nitrogen and Phosphorous compounds.  
 Flash Point Deg F/C: >370/>188 LEL %: N/A % UEL %: N/A %  
 Extinguishing Media: Water Fog, Foam, Dry Chemical, CO2, Sand, or Earth.  
 UN/NA/PIN#: N/A

**Special Fire Fighting Procedures**

Firefighters should wear self-contained breathing equipment. Treat as a Class B fire. Use water to cool threatened containers. 03/04/2011 KCR JV Page 44 of 73

Auto Ign. Temp Deg F/C: >500/>260



PRODUCT NAME: **ROCK DRILL, ALL GRADES**  
EFFECTIVE DATE: 02/19/08 SUPERCEDES DATE: 03/02/05

Unusual fire and explosion hazards: N/A

Explosion Power: N/A

Impact Sensitive: No

Burning Rate: Low

Static Sensitive: No

#### SECTION 5 - HEALTH HAZARD DATA

Product guide: TLV see Section 2 STEL: see Section 2

Routes of Entry: Skin contact, Eye, Inhalation, Ingestion

Effects of Overexposure:

Acute; may cause respiratory system, skin, and/or eye irritation.

Ingestion may cause nausea, cramps, diarrhea, and other gastrointestinal disorders.

Chronic; excess mist may cause respiratory problems.

Excess skin contact may cause dryness and/or sensitization.

Any suspected carcinogen = or > 0.1%?: NO

Warning: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

##### Emergency and First Aid Procedures

Eye: Immediately flush with water for 15 minutes and call a physician.

Inhalation: If affected, remove to fresh air, administer oxygen and call a physician.

Skin: Wash thoroughly with plenty of water and soap.

Ingestion: Seek a physician immediately; show MSDS or Label; DO NOT induce vomiting.

Wash soiled clothing before wearing again.

#### SECTION 6 - REACTIVITY DATA

Stable: YES

Conditions to Avoid: N/A

Incompatibility (Materials to avoid): YES, strong oxidizing agents

Hazardous Decomposition Products: YES, combustion products, see Section 4

Hazardous Polymerization: NO

Conditions to Avoid: N/A

#### SECTION 7 - SPILL OR LEAK PROCEDURES

Listed in SARA Title III, #302: NO #304, Cercla: NO #313: NO

Steps to be taken in case material is released or spilled:

Eliminate source if safe to do so. Prevent from entering waterways and drains. Wear suitable personal protective equipment. Dike and absorb with inert material and transfer to a sealed approved container for disposal. Any spill of this material that can enter navigable waters must be reported immediately to the National Response Center (800-424-8802)

Report Quantity, Lb: N/A

Kg: N/A

TPQ, Lb: N/A

Regulations:

Other: N/A

Hazard Waste: NO

NO.:

Disposal Method: In accordance with Federal, State, and Local Regulations.

\*\*\* SARA Waste Characteristic: N/A

\*\*\* EPA Hazardous Waste Number: N/A

#### SECTION 8 - SAFE HANDLING AND PROTECTION INFORMATION

Respiratory Protection: Use only in well ventilated areas.

Ventilation - Local: Recommended

Special: Avoid Heat/Flame

Mechanical: Required

Other: N/A

Protective Gloves: Oil/Solvent resistant Eye Protection: Safety Glasses/Goggles

Other Protective Equipment:

Oil/Solvent resistant clothing and footwear. If ventilation is inadequate, wear approved respiratory equipment.

Estimated LD50, Mg/Kg: YES Dermal, Rabbit 2000, Oral Rat 13000

Estimated LC50, PPM: NO

---

PRODUCT NAME: **ROCK DRILL, ALL GRADES**

EFFECTIVE DATE: 02/19/08

SUPERCEDES DATE: 03/02/05

---

Sensitization: NO

Irritant: NO

Synergistic Agents: NO

---

**SECTION 9 - SPECIAL PRECAUTIONS**

Precautions to be taken in handling and storing:

Use only in well ventilated areas. Avoid prolonged or repeated breathing of fumes, vapor, or mist. Avoid contact with eyes and skin. DO NOT take internally. Wash thoroughly after using. In case of accident or illness, consult a physician immediately; show label and/or MSDS.

Keep out of reach of children.

Always read and follow directions on product label.

Other precautions:

More technical information (MSDS) available upon request. For professional industrial use only. Good personal hygiene is important. Empty containers retain residue which can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other ignition sources; they may explode and cause injury or death.

The information and recommendations provided herein are believed to be accurate as of the date hereof. However, such information and recommendations are provided without warranty of any kind and D-A Lubricant disclaims any and all liability or legal responsibility for use or reliance upon same.

---



## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION.

**D-A Lubricant**

1340 W. 29th St.  
Indianapolis, IN 46208  
317/923-5321

CHEMICAL EMERGENCY HOTLINE 800 899-9004

PRODUCT NAME: **MAGNAPLEX 1,1 1/2,2**

PRODUCT DESCRIPTION: MAGNAPLEX 1,1 1/2,2

CHEMICAL FAMILY: LUBRICATING GREASE

EFFECTIVE DATE: 01/27/09

SUPERCEDES DATE: 01/22/09

Dear Customer:

In compliance with the Superfund Amendments and Reauthorization Act (SARA Title III, Section 313), Federal Hazard Communications Regulations (WHMIS and OSHA 29 CFR 1910.1200) and in the interest of informed use of our product, we are providing you with this Material Safety Data Sheet (MSDS).

This MSDS will be updated regularly to reflect the most recent information in our possession. Please ensure that obsolete MSDS sheets in your files for this part number are discarded.

We THANK YOU for your continued patronage and look forward to providing you with additional quality products and services.

## SECTION 2 - HAZARDOUS INGREDIENTS

COMPONENT	CAS #	% WT	PEL	TLV	STEL	UNITS	LC50, PPM	LD50, MG/KG
PETROLEUM OILS								
	64742-65-0	60-65	5	5	10	MG/M3		RATI 13000 RABA 2000
	64741-95-3	20-25	5	5	10	MG/M3		RATI 5000 RABA 2000
MOLYBDENUM DISULFIDE								
	01317-33-5	1-5	15	10		MG/M3		RATI 6500
ZINC DIORGANO-DITHIOPHOSPHATE								
	68649-42-3	0.5-1.5						RATI >5000 RABA >2000 SARA Rep.
PETROLEUM OILS								
	64742-52-5	60-65	5	5	10	MG/M3		RATI 5000 RABA 2000
LITHIUM HYDROXIDE								
	1310-66-3	1-5						
ANTIMONY DIALKYL-DITHIOCARBAMATE								
	15890-25-2	0-0.5	0.5	0.5		MG/M3	100	RATI 16400 RABA 16000 SARA Rep.
CALCIUM CARBONATE (SALT)								
	471-34-1	5-7	5	10		MG/M3		RATI 6450

## SECTION 3 - PHYSICAL DATA

Boiling Pt Deg F/C: >500/>260	Specific Gravity: 0.86 TO .92
Vapor Pressure (MM HG): NIL	% Volatile Volume: NIL
Vapor Density (Air=1): N/A	Evaporation Rate: <0.1
Solubility in Water: NEGLIGIBLE	Water/Oil Dist Coeff: 0
Appearance and Odor: Gray grease with petroleum odor	
Physical State: SEMI SOLID	PH: N/A
Freeze Pt Deg F/C: N/A	Threshold Odor, PPM: N/A
Other: N/A	VOC: Lbs/Gal = N/A
Grams/Liter = N/A	Grams VOC/Gram Solid = N/A
% VOC: N/A	



PRODUCT NAME: **MAGNAPLEX 1,1 1/2,2**

EFFECTIVE DATE: 01/27/09

SUPERCEDES DATE: 01/22/09

**SECTION 4 - FIRE AND EXPLOSION HAZARD DATA**

Classification: Combustible at high temp NFPA Rating: 1.1.0

HMIS RATING: 1.1.0

Combustion products: CO, CO2, Smoke, Sulfur, Nitrogen, Phosphorous, Zinc, Antimony, and Molybdenum Compounds.

Flash Point Deg F/C: &gt;450/232

LEL %: N/A % UEL %: N/A %

Extinguishing Media: Water Fog, Foam, Dry Chemical, CO2, Sand, or Earth.

UN/NA/PIN#: N/A

**Special Fire Fighting Procedures**

Firefighters should wear self-contained breathing equipment. Treat as a Class B fire. Use water to cool threatened containers.

Auto Ign. Temp Deg F/C: &gt;500/&gt;260

Unusual fire and explosion hazards: N/A

Explosion Power: N/A

Impact Sensitive: No

Burning Rate: Low

Static Sensitive: No

**SECTION 5 - HEALTH HAZARD DATA**

Product Guide: TLV see Section 2

STEL: see Section 2

Routes of Entry: Skin contact, Eye, Inhalation, Ingestion

Effects of Overexposure:

Acute; may cause respiratory system, skin, and/or eye irritation.

Ingestion may cause nausea, cramps, diarrhea, and other gastrointestinal disorders.

Chronic; excess mist may cause respiratory problems.

Excess skin contact may cause dryness and/or sensitization.

Excess inhalation and/or ingestion may be harmful to respiration system and heart.

Any suspected carcinogen = or &gt; 0.1%?: NO

**Emergency and First Aid Procedures**

Eye: Immediately flush with plenty of water for 15 minutes and call a physician.

Inhalation: If affected, remove to fresh air, administer oxygen and call a physician.

Skin: Wash thoroughly with plenty of water and soap.

Ingestion: Seek a physician immediately, show MSDS or Label; Do Not Induce vomiting.

Wash soiled clothing before wearing again.

**SECTION 6 - REACTIVITY DATA**

Stable: YES

Conditions to Avoid: N/A

Incompatibility (Materials to avoid): YES, strong oxidizing agents

Hazardous Decomposition Products: YES, combustion products, see Section 4

Hazardous Polymerization: NO

Conditions to Avoid: N/A

**SECTION 7 - SPILL OR LEAK PROCEDURES**

Listed in SARA Title III, #302: NO

#304, Cercla: NO

#313: YES

Steps to be taken in case material is released or spilled:

Eliminate source if safe to do so. Prevent from entering waterways and drains. Wear suitable personal protective equipment. Dike and absorb with inert material and transfer to a sealed approved container for disposal.

Report Quantity, Lb: N/A

Kg: N/A

TPQ, Lb: N/A

Regulations: SARA

Other: N/A

Hazard Waste: NO

NO.:

Disposal Method: In accordance with Federal, State, and Local Regulations.

\*\*\* SARA Waste Characteristic: N/A

\*\*\* EPA Hazardous Waste Number: N/A

PRODUCT NAME: **MAGNAPLEX 1,1 1/2,2**

EFFECTIVE DATE: 01/27/09

SUPERCEDES DATE: 01/22/09

**SECTION 8 - SAFE HANDLING AND PROTECTION INFORMATION**

Respiratory Protection: Use only in well ventilated areas.

Ventilation - Local: Recommended

Special: Avoid Heat/Flame

Mechanical: Required

Other: N/A

Protective Gloves: Oil/Solvent resistant Eye Protection: Safety Glasses/Goggles

Other Protective Equipment:

Oil/Solvent resistant clothing and footwear. If ventilation is inadequate, wear approved respiratory equipment.

Estimated LD50, Mg/Kg: YES Dermal, Rabbit >2000 Oral Rat >5000

Estimated LC50, PPM: NO

Sensitization: NO

Irritant: NO

Synergistic Agents: NO

**SECTION 9 - SPECIAL PRECAUTIONS**

Precautions to be taken in handling and storing:

Use only in well ventilated areas. Avoid prolonged or repeated breathing of fumes, vapor, or mist. Avoid contact with eyes and skin. DO NOT take internally. Wash thoroughly after using. In case of accident or illness, consult a physician immediately; show label and/or MSDS.

Keep out of reach of children.

Always read and follow directions on product label.

Other precautions:

More technical information (MSDS) available upon request. For professional industrial use only. Good personal hygiene is important. Empty containers retain residue which can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other ignition sources; they may explode and cause injury or death.

The information and recommendations provided herein are believed to be accurate as of the date hereof. However, such information and recommendations are provided without warranty of any kind and D-A Lubricant disclaims any and all liability or legal responsibility for use or reliance upon same.

**SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION.****D-A Lubricant**

1340 W. 29th St.  
Indianapolis, IN 46208  
317/923-5321

CHEMICAL EMERGENCY HOTLINE 800 899-9004

PRODUCT NAME: **WEARGUARD II**

PRODUCT DESCRIPTION: WEAR GUARD

CHEMICAL FAMILY: PETROLEUM OIL, HYDRAULIC FLUID

EFFECTIVE DATE: 03/03/08

SUPERCEDES DATE: 02/19/08

Dear Customer:

In compliance with the Superfund Amendments and Reauthorization Act (SARA Title III, Section 313), Federal Hazard Communications Regulations (WHMIS and OSHA 29 CFR 1910.1200) and in the interest of informed use of our product, we are providing you with this Material Safety Data Sheet (MSDS).

This MSDS will be updated regularly to reflect the most recent information in our possession. Please ensure that obsolete MSDS sheets in your files for this part number are discarded.

We THANK YOU for your continued patronage and look forward to providing you with additional quality products and services.

**SECTION 2 - HAZARDOUS INGREDIENTS**

COMPONENT	CAS #	% WT	PEL	TLV	STEL	UNITS	LC50, PPM	LD50, MG/KG
PETROLEUM OILS								
	64742-65-0	60-99	5	5	10	MG/M3		RATI 13000 RABA 2000
	64741-88-4	60-99	5	5	10	MG/M3		RATI 13000 RABA 2000
	64742-58-1	60-99	5	5	10	MG/M3		RATI 13000 RABA 2000
	64742-01-4	60-99	5	5	10	MG/M3		RATI 13000 RABA 2000
		60-99						
ZINC DIORGANO-DITHIOPHOSPHATE								
	68649-42-3	.1-1						RATI >5000 RABA >2000 SARA Rep.
PETROLEUM OILS								
	64741-89-5	60-99	5	5		MG/M3		RATI 13000 RABA 2000

**SECTION 3 - PHYSICAL DATA**

Boiling Pt Deg F/C: >500/>260	Specific Gravity: 0.86 to 0.90
Vapor Pressure (MM HG): NIL	% Volatile Volume: NIL
Vapor Density (Air=1): N/A	Evaporation Rate: <0.1
Solubility in Water: NEGLIGIBLE	Water/Oil Dist Coeff: 0
Appearance and Odor: Amber Liquid with Mild Petroleum Odor	
Physical State: Liquid	PH: N/A
Freeze Pt Deg F/C: N/A	Threshold Odor, PPM: N/A
Other: N/A	VOC: Lbs/Gal = N/A
Grams/Liter = N/A	Grams Vol/Gram Solid = N/A
% VOC: N/A	

**SECTION 4 - FIRE AND EXPLOSION HAZARD DATA**

Classification: Combustible at high temp NFPA Rating: 1.1.0  
Combustion products: CO, CO2, Smoke, Sulfur, Nitrogen, Calcium, Phosphorous, and Zinc compounds.

Flash Point Deg F/C: >370/>188

LEL %: N/A % UEL %: N/A %

Extinguishing Media: Water Fog, Foam, Dry Chemical, CO2, Sand, or Earth.

UN/NA/PIN#: N/A



PRODUCT NAME: **WEARGUARD II**

EFFECTIVE DATE: 03/03/08

SUPERCEDES DATE: 02/19/08

**Special Fire Fighting Procedures**

Firefighters should wear self-contained breathing equipment. Treat as a Class B fire. Use water to cool threatened containers.

Auto Ign. Temp Deg F/C: &gt;500/&gt;260

Unusual fire and explosion hazards: N/A

Explosion Power: N/A

Impact Sensitive: No

Burning Rate: Low

Static Sensitive: No

**SECTION 5 - HEALTH HAZARD DATA**

Product guide: TLV see Section 2 STEL: see Section 2

Routes of Entry: Skin contact, Eye, Inhalation, Ingestion

Effects of Overexposure:

Acute; may cause respiratory system, skin, and/or eye irritation.

Ingestion may cause nausea, cramps, diarrhea, and other gastrointestinal disorders.

Chronic; excess mist may cause respiratory problems.

Excess skin contact may cause dryness and/or sensitization.

Any suspected carcinogen = or &gt; 0.1%?: NO

Warning: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**Emergency and First Aid Procedures**

Eye: Immediately flush with water for 15 minutes and call a physician.

Inhalation: If affected, remove to fresh air, administer oxygen and call a physician.

Skin: Wash thoroughly with plenty of water and soap.

Ingestion: Seek a physician immediately; show MSDS or Label; DO NOT induce vomiting.

Wash soiled clothing before wearing again.

**SECTION 6 - REACTIVITY DATA**

Stable: YES

Conditions to Avoid: N/A

Incompatibility (Materials to avoid): YES, strong oxidizing agents

Hazardous Decomposition Products: YES, combustion products, see Section 4

Hazardous Polymerization: NO

Conditions to Avoid: N/A

**SECTION 7 - SPILL OR LEAK PROCEDURES**

Listed in SARA Title III, #302: NO #304, Cercla: NO #313: YES

Steps to be taken in case material is released or spilled:

Eliminate source if safe to do so. Prevent from entering waterways and drains. Wear suitable personal protective equipment. Dike and absorb with inert material and transfer to a sealed approved container for disposal. Any spill of this material that can enter navigable waters must be reported immediately to the National Response Center (800-424-8802)

Report Quantity, Lb: N/A

Kg: N/A

TPQ, Lb: N/A

Regulations: SARA, TSCA

Other: N/A

Hazard Waste: NO

NO.:

Disposal Method: In accordance with Federal, State, and Local Regulations.

\*\*\* SARA Waste Characteristic: N/A

\*\*\* EPA Hazardous Waste Number: N/A

**SECTION 8 - SAFE HANDLING AND PROTECTION INFORMATION**

Respiratory Protection: Use only in well ventilated areas.

Ventilation - Local: Recommended

Special: Avoid Heat/Flame

Mechanical: Required

Other: N/A

Protective Gloves: Oil/Solvent resistant Eye Protection: Safety Glasses/Goggles

Other Protective Equipment:

---

PRODUCT NAME: **WEARGUARD II**

EFFECTIVE DATE: 03/03/08

SUPERCEDES DATE: 02/19/08

---

Oil/Solvent resistant clothing and footwear. If ventilation is inadequate, wear approved respiratory equipment.

Estimated LD50, Mg/Kg: YES Dermal, Rabbit 2000, Oral Rat 13000

Estimated LC50, PPM: NO

Sensitization: NO

Irritant: NO

Synergistic Agents: NO

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#### **SECTION 9 - SPECIAL PRECAUTIONS**

Precautions to be taken in handling and storing:

Use only in well ventilated areas. Avoid prolonged or repeated breathing of fumes, vapor, or mist. Avoid contact with eyes and skin. DO NOT take internally. Wash thoroughly after using. In case of accident or illness, consult a physician immediately; show label and/or MSDS.

Keep out of reach of children.

Always read and follow directions on product label.

Other precautions:

More technical information (MSDS) available upon request. For professional industrial use only. Good personal hygiene is important. Empty containers retain residue which can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other ignition sources; they may explode and cause injury or death.

The information and recommendations provided herein are believed to be accurate as of the date hereof. However, such information and recommendations are provided without warranty of any kind and D-A Lubricant disclaims any and all liability or legal responsibility for use or reliance upon same.

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**SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION.****D-A Lubricant**

1340 W. 29th St.  
Indianapolis, IN 46208  
317/923-5321

CHEMICAL EMERGENCY HOTLINE 800 899-9004

PRODUCT NAME: **EXCELON EBS**

PRODUCT DESCRIPTION: EXCELON EBS (formerly Titan EBS)

CHEMICAL FAMILY: PETROLEUM OIL, MOTOR OIL

EFFECTIVE DATE: 03/03/08

SUPERCEDES DATE: 02/19/08

Dear Customer:

In compliance with the Superfund Amendments and Reauthorization Act (SARA Title III, Section 313), Federal Hazard Communications Regulations (WHMIS and OSHA 29 CFR 1910.1200) and in the interest of informed use of our product, we are providing you with this Material Safety Data Sheet (MSDS).

This MSDS will be updated regularly to reflect the most recent information in our possession. Please ensure that obsolete MSDS sheets in your files for this part number are discarded.

We THANK YOU for your continued patronage and look forward to providing you with additional quality products and services.

**SECTION 2 - HAZARDOUS INGREDIENTS**

COMPONENT	CAS #	% WT	PEL	TLV	STEL	UNITS	LC50, PPM	LD50, MG/KG
PETROLEUM OILS								
	64742-65-0	60-99	5	5	10	MG/M3		RATI 13000 RABA 2000
	64741-88-4	60-99	5	5	10	MG/M3		RATI 13000 RABA 2000
ZINC DIORGANO-DITHIOPHOSPHATE								
	68649-42-3	>1.5						RATI >5000 RABA >2000 SARA Rep.
PETROLEUM OILS								
	64741-89-5	60-99	5	5		MG/M3		RATI 13000 RABA 2000

**SECTION 3 - PHYSICAL DATA**

Boiling Pt Deg F/C: >500/>260	Specific Gravity: 0.86 to 0.90
Vapor Pressure (MM HG): NIL	% Volatile Volume: NIL
Vapor Density (Air=1): N/A	Evaporation Rate: <0.1
Solubility in Water: NEGLIGIBLE	Water/Oil Dist Coeff: 0
Appearance and Odor: Brown fluid with Mild Petroleum Odor	
Physical State: LIQUID	PH: N/A
Freeze Pt Deg F/C: N/A	Threshold Odor, PPM: N/A
Other: N/A	VOC: Lbs/Gal = N/A
Grams/Liter = N/A	Grams VOC/Grams Solid = N/A
% VOC: N/A	

**SECTION 4 - FIRE AND EXPLOSION HAZARD DATA**

Classification: Combustible at high temp NFPA Rating: 1.1.0  
 Combustion products: CO, CO2, Smoke, Sulfur, Nitrogen, Phosphorous, Boron, Molybdenum, Calcium, and Zinc Compounds.  
 Flash Point Deg F/C: >370/>188 LEL %: N/A % UEL %: N/A %  
 Extinguishing Media: Water Fog, Foam, Dry Chemical, CO2, Sand, or Earth.  
 UN/NA/PIN#: N/A

**Special Fire Fighting Procedures**

Firefighters should wear self-contained breathing equipment. Treat as a Class B fire. Use



PRODUCT NAME: **EXCELON EBS**

EFFECTIVE DATE: 03/03/08

SUPERCEDES DATE: 02/19/08

water to cool threatened containers.

Auto Ign. Temp Deg F/C: &gt;500/&gt;260

Unusual fire and explosion hazards: N/A

Explosion Power: N/A

Impact Sensitive: No

Burning Rate: Low

Static Sensitive: No

**SECTION 5 - HEALTH HAZARD DATA**

Product guide: TLV see Section 2 STEL: see Section 2

Routes of Entry: Skin contact, Eye, Inhalation, Ingestion

Effects of Overexposure:

Acute; may cause respiratory system, skin, and/or eye irritation.

Ingestion may cause nausea, cramps, diarrhea, and other gastrointestinal disorders.

Chronic; excess mist may cause respiratory problems.

Excess skin contact may cause dryness and/or sensitization.

Any suspected carcinogen = or &gt; 0.1%?: NO

Warning: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**Emergency and First Aid Procedures**

Eye: Immediately flush with water for 15 minutes and call a physician.

Inhalation: If affected, remove to fresh air, administer oxygen and call a physician.

Skin: Wash thoroughly with plenty of water and soap.

Ingestion: Seek a physician immediately; show MSDS or Label; DO NOT induce vomiting.

Wash soiled clothing before wearing again.

**SECTION 6 - REACTIVITY DATA**

Stable: YES

Conditions to Avoid: N/A

Incompatibility (Materials to avoid): YES, strong oxidizing agents

Hazardous Decomposition Products: YES, combustion products, see Section 4

Hazardous Polymerization: NO

Conditions to Avoid: N/A

**SECTION 7 - SPILL OR LEAK PROCEDURES**

Listed in SARA Title III, #302: NO #304, Cercla: NO #313: YES

Steps to be taken in case material is released or spilled:

Eliminate source if safe to do so. Prevent from entering waterways and drains. Wear suitable personal protective equipment. Dike and absorb with inert material and transfer to a sealed approved container for disposal. Any spill of this material that can enter navigable waters must be reported immediately to the National Response Center (800-424-8802)

Report Quantity, Lb: N/A

Kg: N/A

TPQ, Lb: N/A

Regulations: SARA, TSCA

Other: N/A

Hazard Waste: NO

NO.:

Disposal Method: In accordance with Federal, State, and Local Regulations.

\*\*\* SARA Waste Characteristic: N/A

\*\*\* EPA Hazardous Waste Number: N/A

**SECTION 8 - SAFE HANDLING AND PROTECTION INFORMATION**

Respiratory Protection: Use only in well ventilated areas.

Ventilation - Local: Recommended

Special: Avoid Heat/Flame

Mechanical: Required

Other: N/A

Protective Gloves: Oil/Solvent resistant Eye Protection: Safety Glasses/Goggles

Other Protective Equipment:

Oil/Solvent resistant clothing and footwear. If ventilation is inadequate, wear approved respiratory equipment.

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PRODUCT NAME: **EXCELON EBS**

EFFECTIVE DATE: 03/03/08

SUPERCEDES DATE: 02/19/08

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Estimated LD50, Mg/Kg: YES Dermal, Rabbit 2000, Oral Rat 13000

Estimated LC50, PPM: NO

Sensitization: NO

Irritant: NO

Synergistic Agents: NO

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**SECTION 9 - SPECIAL PRECAUTIONS**

Precautions to be taken in handling and storing:

Use only in well ventilated areas. Avoid prolonged or repeated breathing of fumes, vapor, or mist. Avoid contact with eyes and skin. DO NOT take internally. Wash thoroughly after using. In case of accident or illness, consult a physician immediately; show label and/or MSDS.

Keep out of reach of children.

Always read and follow directions on product label.

Other precautions:

More technical information (MSDS) available upon request. For professional industrial use only. Good personal hygiene is important. Empty containers retain residue which can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other ignition sources; they may explode and cause injury or death.

The information and recommendations provided herein are believed to be accurate as of the date hereof. However, such information and recommendations are provided without warranty of any kind and D-A Lubricant disclaims any and all liability or legal responsibility for use or reliance upon same.

---

**SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION.****D-A Lubricant**

1340 W. 29th St.  
Indianapolis, IN 46208  
317/923-5321

CHEMICAL EMERGENCY HOTLINE 800 899-9004

PRODUCT NAME: **DURAPLEX**

PRODUCT DESCRIPTION: DURAPLEX, GRADES 1 AND 2

CHEMICAL FAMILY: PETROLEUM OIL, GREASE

EFFECTIVE DATE: 01/22/09

SUPERCEDES DATE: 02/19/08

Dear Customer:

In compliance with the Superfund Amendments and Reauthorization Act (SARA Title III, Section 313), Federal Hazard Communications Regulations (WHMIS and OSHA 29 CFR 1910.1200) and in the interest of informed use of our product, we are providing you with this Material Safety Data Sheet (MSDS).

This MSDS will be updated regularly to reflect the most recent information in our possession. Please ensure that obsolete MSDS sheets in your files for this part number are discarded.

We THANK YOU for your continued patronage and look forward to providing you with additional quality products and services.

**SECTION 2 - HAZARDOUS INGREDIENTS**

COMPONENT	CAS #	% WT	PEL	TLV	STEL	UNITS	LC50, PPM	LD50, MG/KG	
PETROLEUM OILS									
	64742-52-5	60-99	5	5	10	MG/M3		RATI 5000	RABA 2000
BARIUM TALLOW FATTY ACID COMPLEX									
	68201-19-4	10-30	0.5	0.5		MG/M3			SARA Rep.
MOLYBDENUM DISULFIDE									
	01317-33-5	1-5	15	10		MG/M3		RATI 6500	
ZINC NAPHTHENATE									
	12001-85-3	1-5							SARA Rep.

**SECTION 3 - PHYSICAL DATA**

Boiling Pt Deg F/C: >500/>260	Specific Gravity: 0.89 TO 0.98
Vapor Pressure (MM HG): NIL	% Volatile Volume: NIL
Vapor Density (Air=1): N/A	Evaporation Rate: <0.1
Solubility in Water: NEGLIGIBLE	Water/Oil Dist Coeff: 0
Appearance and Odor: Gray grease with petroleum odor	
Physical State: SEMI SOLID	PH: N/A
Freeze Pt Deg F/C: N/A	Threshold Odor, PPM: N/A
Other: N/A	VOC: Lbs/Gal = N/A
Grams/Liter = N/A	Grams VOC/Gram Solid = N/A
% VOC: N/A	

**SECTION 4 - FIRE AND EXPLOSION HAZARD DATA**

Classification: Combustible at high temp NFPA Rating: 0.1.0  
 Combustion products: CO, CO2, Smoke, Sulfur, Nitrogen, Barium, Molybdenum, Phosphorus, and Zinc compounds.  
 Flash Point Deg F/C: >370/>188 LEL %: N/A UEL %: N/A  
 Extinguishing Media: Water Fog, Foam, Dry Chemical, CO2, Sand, or Earth.  
 UN/NA/PIN#: N/A



PRODUCT NAME: **DURAPLEX**

EFFECTIVE DATE: 01/22/09

SUPERCEDES DATE: 02/19/08

Firefighters should wear self-contained breathing equipment. Treat as a Class B fire. Use water to cool threatened containers.

Auto Ign. Temp Deg F/C: &gt;500/&gt;260

Unusual fire and explosion hazards: N/A

Explosion Power: N/A

Impact Sensitive: No

Burning Rate: Low

Static Sensitive: No

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**SECTION 5 - HEALTH HAZARD DATA**

Product Guide: TLV see Section 2

STEL: see Section 2

Routes of Entry: Skin contact, Eye, Inhalation, Ingestion

Effects of Overexposure:

Acute; may cause respiratory system, skin, and/or eye irritation.

Ingestion may cause nausea, cramps, diarrhea, and other gastrointestinal disorders.

Chronic; excess mist may cause respiratory problems.

Excess skin contact may cause dryness.

Excess skin contact and/or ingestion may cause damage to lungs, kidneys, heart, stomach and/or reproductive system.

Any suspected carcinogen = or &gt;0.1%: NO

Warning: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**Emergency and First Aid Procedures**

Eye: Immediately flush with water for 15 minutes and call a physician.

Inhalation: If affected, remove to fresh air, administer oxygen and call a physician.

Skin: Wash thoroughly with plenty of water and soap.

Ingestion: Seek a physician immediately, show MSDS or Label; DO NOT induce vomiting.

Wash soiled clothing before wearing again.

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**SECTION 6 - REACTIVITY DATA**

Stable: YES

Conditions to Avoid: N/A

Incompatibility (Materials to avoid): YES, strong oxidizing agents

Hazardous Decomposition Products: YES, pyrolysis products, CO, SOX

Hazardous Polymerization: NO

Conditions to Avoid: N/A

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**SECTION 7 - SPILL OR LEAK PROCEDURES**

Listed in SARA Title III, #302: NO

#304, Cercla: YES

#313: YES

Steps to be taken in case material is released or spilled:

Eliminate source if safe to do so. Prevent from entering waterways and drains. Wear suitable personal protective equipment. Dike and absorb with inert material and transfer to a sealed approved container for disposal.

Report Quantity, Lb: N/A

Kg: N/A

TPQ, Lb: N/A

Regulations: SARA, CERCLA, RCRA, WHMIS

Other:

Hazard Waste: EP Toxic

No.: D005, D008

Disposal Method: In accordance with Federal, State, and Local Regulations.

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**SECTION 8 - SAFE HANDLING AND PROTECTION INFORMATION**

Respiratory Protection: Use only in well ventilated areas.

Ventilation - Local: Recommended

Special: Avoid Heat/Flame

Mechanical: Required

Other: N/A

Protective Gloves: Oil/Solvent resistant Eye Protection: Safety Glasses/Goggles

Other Protective Equipment:

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Oil/Solvent resistant clothing and footwear. If ventilation is inadequate,

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PRODUCT NAME: **DURAPLEX**

EFFECTIVE DATE: 01/22/09

SUPERCEDES DATE: 02/19/08

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wear approved respiratory equipment.

Estimated LD50, Mg/Kg: YES Dermal, Rabbit 2000, Oral Rat 5100

Estimated LC50, PPM: NO

Sensitization: NO

Irritant: NO

Synergistic Agents: NO

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**SECTION 9 - SPECIAL PRECAUTIONS**

Precautions to be taken in handling and storing:

Use only in well ventilated areas. Avoid prolonged or repeated breathing of fumes, vapor, or mist. Avoid contact with eyes and skin. DO NOT take internally. Wash thoroughly after using. Keep away from food, drink and animal feeds. Keep only in original labeled containers. In case of accident or illness, consult a physician immediately; show label and/or MSDS. Keep out of reach of children. Always read and follow directions on label.

Other precautions:

More technical information (MSDS) available upon request. For professional industrial use only. Good personal hygiene is most important. Empty containers retain residue which can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, spark or other ignition sources; they may explode and cause injury or death.

The information and recommendations provided herein are believed to be accurate as of the date hereof. However, such information and recommendations are provided without warranty of any kind and D-A Lubricant disclaims any and all liability or legal responsibility for use or reliance upon same.

---

**SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION.****D-A Lubricant**

1340 W. 29th St.  
Indianapolis, IN 46208  
317/923-5321

CHEMICAL EMERGENCY HOTLINE 800 899-9004

PRODUCT NAME: **DTL GEAR OIL, ALL GRADES**

PRODUCT DESCRIPTION: DTL GEAR OIL, ALL GRADES

CHEMICAL FAMILY: PETROLEUM OIL, GEAR OIL

EFFECTIVE DATE: 02/19/08

SUPERCEDES DATE: 03/02/05

Dear Customer:

In compliance with the Superfund Amendments and Reauthorization Act (SARA Title III, Section 313), Federal Hazard Communications Regulations (WHMIS and OSHA 29 CFR 1910.1200) and in the interest of informed use of our product, we are providing you with this Material Safety Data Sheet (MSDS).

This MSDS will be updated regularly to reflect the most recent information in our possession. Please ensure that obsolete MSDS sheets in your files for this part number are discarded.

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**SECTION 2 - HAZARDOUS INGREDIENTS**

COMPONENT	CAS #	% WT	PEL	TLV	STEL	UNITS	LC50, PPM	LD50, MG/KG
PETROLEUM OILS								
	64742-65-0	60-99	5	5	10	MG/M3	RATI 13000	RABA 2000
	64741-88-4	60-99	5	5	10	MG/M3	RATI 13000	RABA 2000
	64742-01-4	60-99	5	5	10	MG/M3	RATI 13000	RABA 2000
		60-99						
MOLYBDENUM DISULFIDE								
	01317-33-5	0.1-5	15	10		MG/M3	RATI 6500	

**SECTION 3 - PHYSICAL DATA**

Boiling Pt Deg F/C: >500/>260	Specific Gravity: 0.86 to 0.90
Vapor Pressure (MM HG): NIL	% Volatile Volume: NIL
Vapor Density (Air=1): N/A	Evaporation Rate: <0.1
Solubility in Water: NEGLIGIBLE	Water/Oil Dist Coeff: 0
Appearance and Odor: Dark Amber Fluid with Mild Petroleum Odor	
Physical State: LIQUID	PH: N/A
Freeze Pt Deg F/C: N/A	Threshold Odor, PPM: N/A
Other: N/A	VOC: Lbs/Gal = N/A
Grams/Liter = N/A	Grams VOC/Grams Solid = N/A
% VOC: N/A	

**SECTION 4 - FIRE AND EXPLOSION HAZARD DATA**

Classification: Combustible at high temp NFPA Rating: 1.1.0

Combustion products: CO, CO2, Smoke, Sulfur, Nitrogen, Phosphorous, Boron and Molybdenum Compounds.

Flash Point Deg F/C: >370/>188 LEL %: N/A % UEL %: N/A %

Extinguishing Media: Water Fog, Foam, Dry Chemical, CO2, Sand, or Earth.

UN/NA/PIN#: N/A

**Special Fire Fighting Procedures**

Firefighters should wear self-contained breathing equipment and treat as a Class B fire. Use water to cool threatened containers.



PRODUCT NAME: **DTL GEAR OIL, ALL GRADES**  
EFFECTIVE DATE: 02/19/08 SUPERCEDES DATE: 03/02/05

Auto Ign. Temp Deg F/C: >500/>260

Unusual fire and explosion hazards: N/A

Explosion Power: N/A

Impact Sensitive: No

Burning Rate: Low

Static Sensitive: No

#### SECTION 5 - HEALTH HAZARD DATA

Product guide: TLV see Section 2 STEL: see Section 2

Routes of Entry: Skin contact, Eye, Inhalation, Ingestion

Effects of Overexposure:

Acute; may cause respiratory system, skin, and/or eye irritation.

Ingestion may cause nausea, cramps, diarrhea, and other gastrointestinal disorders.

Chronic; excess mist may cause respiratory problems.

Excess skin contact may cause dryness and/or sensitization.

Any suspected carcinogen = or > 0.1%?: NO

Warning: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

##### Emergency and First Aid Procedures

Eye: Immediately flush with water for 15 minutes and call a physician.

Inhalation: If affected, remove to fresh air, administer oxygen and call a physician.

Skin: Wash thoroughly with plenty of water and soap.

Ingestion: Seek a physician immediately; show MSDS or Label; DO NOT induce vomiting.

Wash soiled clothing before wearing again.

#### SECTION 6 - REACTIVITY DATA

Stable: YES

Conditions to Avoid: N/A

Incompatibility (Materials to avoid): YES, strong oxidizing agents

Hazardous Decomposition Products: YES, combustion products, see Section 4

Hazardous Polymerization: NO

Conditions to Avoid: N/A

#### SECTION 7 - SPILL OR LEAK PROCEDURES

Listed in SARA Title III, #302: NO #304, Cercla: NO #313: NO

Steps to be taken in case material is released or spilled:

Eliminate source if safe to do so. Prevent from entering waterways and drains. Wear suitable personal protective equipment. Dike and absorb with inert material and transfer to a sealed approved container for disposal. Any spill of this material that can enter navigable waters must be reported immediately to the National Response Center (800-424-8802)

Report Quantity, Lb: N/A

Kg: N/A

TPQ, Lb: N/A

Regulations:

Other: N/A

Hazard Waste: NO

NO.:

Disposal Method: In accordance with Federal, State, and Local Regulations.

\*\*\* SARA Waste Characteristic: N/A

\*\*\* EPA Hazardous Waste Number: N/A

#### SECTION 8 - SAFE HANDLING AND PROTECTION INFORMATION

Respiratory Protection: Use only in well ventilated areas.

Ventilation - Local: Recommended

Special: Avoid Heat/Flame

Mechanical: Required

Other: N/A

Protective Gloves: Oil/Solvent resistant Eye Protection: Safety Glasses/Goggles

Other Protective Equipment:

Oil/Solvent resistant clothing and footwear. If ventilation is inadequate, wear approved respiratory equipment.

Estimated LD50, Mg/Kg: YES Dermal, Rabbit 2000, Oral Rat 13000

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PRODUCT NAME:	DTL GEAR OIL, ALL GRADES		
EFFECTIVE DATE:	02/19/08	SUPERCEDES DATE:	03/02/05

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Estimated LC50, PPM: NO

Sensitization: NO

Irritant: NO

Synergistic Agents: NO

---

#### SECTION 9 - SPECIAL PRECAUTIONS

Precautions to be taken in handling and storing:

Use only in well ventilated areas. Avoid prolonged or repeated breathing of fumes, vapor, or mist. Avoid contact with eyes and skin. DO NOT take internally. Wash thoroughly after using. In case of accident or illness, consult a physician immediately; show label and/or MSDS.

Keep out of reach of children.

Always read and follow directions on product label.

Other precautions:

More technical information (MSDS) available upon request. For professional industrial use only. Good personal hygiene is important. Empty containers retain residue which can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other ignition sources; they may explode and cause injury or death.

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# CITGO No. 2 Diesel Fuel, Low Sulfur, All Grades

## Material Safety Data Sheet

CITGO Petroleum Corporation  
P. O. Box 4689  
Houston, TX 77210

MSDS No. AG2DF  
Revision Date 12/31/2007

**IMPORTANT:** This MSDS is prepared in accordance with 29 CFR 1910.1200. Read this MSDS before transporting, handling, storing or disposing of this product and forward this information to employees, customers and users of this product.

### Hazard Rankings

	HMIS	NFPA
Health Hazard	* 2	0
Fire Hazard	2	2
Reactivity	0	0

\* = Chronic Health Hazard

### Emergency Overview

**Physical State** Liquid.

**Color** Transparent, clear to yellow or red. **Odor** Characteristic, kerosene-like.

#### WARNING!

**Combustible liquid; vapor may cause flash fire.**

**Harmful or fatal if swallowed - can enter lungs and cause damage.**

**Can cause eye, skin or respiratory tract irritation.**

**May be harmful if inhaled or absorbed through the skin.**

**Overexposure can cause central nervous system (CNS) depression and/or other target organ effects.**

**Possible Cancer Hazard (See Section 3)**

**Harmful to aquatic organisms.**

### Protective Equipment

Minimum Recommended  
See Section 8 for Details



## SECTION 1. PRODUCT IDENTIFICATION

<b>Trade Name</b>	CITGO No. 2 Diesel Fuel, Low Sulfur, All Grades	<b>Technical Contact</b>	(832) 486-5940
<b>Product Number</b>	Various	<b>Medical Emergency</b>	(832) 486-4700
<b>CAS Number</b>	68476-34-6	<b>CHEMTREC Emergency (United States Only)</b>	(800) 424-9300
<b>Product Family</b>	Motor fuels.		
<b>Synonyms</b>	No. 2-D Grade Diesel Fuel Oil (defined by ASTM D-975); Treated or Refined Diesel Fuel No. 2; Diesel No. 2; Diesel Motor Fuel No. 2; Diesel Oil (Medium); Grade 2 Distillate Fuel; Hydrodesulfurized (HDS) Light Catalytically Cracked Distillate; Middle Distillates (Petroleum); HDS Diesel; Hydrodesulfurized Medium Distillate; HDS Middle Distillate; C9-C16 Petroleum Hydrocarbons; Ultra Low Sulfur Diesel.		

## SECTION 2. COMPOSITION

This product may be composed, in whole or in part, of any of the following refinery streams:

Diesel Fuel No. 2 [CAS No.: 68476-34-6]

Hydrodesulfurized Middle Distillate (petroleum) [CAS No.: 64742-80-9]

Hydrodesulfurized Light Catalytic Cracked Distillate (Petroleum) [CAS No.: 68333-25-5]

Kerosene [CAS No.: 8008-20-6]

Hydrodesulfurized Kerosine (Petroleum) [CAS No.: 64742-81-0]

This product contains the following chemical components:

Component Name(s)	CAS Registry No.	Concentration (%)
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## CITGO No. 2 Diesel Fuel, Low Sulfur, All Grades

Nonane, all isomers	Mixture	1 - 10
Trimethylbenzenes, all isomers	25551-13-7	0 - 2
Naphthalene	91-20-3	0 - 2
Cumene	98-82-8	0 - 1
Ethylbenzene	100-41-4	0 - 1

### SECTION 3. HAZARDS IDENTIFICATION

Also see Emergency Overview and Hazard Ratings on the top of Page 1 of this MSDS.

**Major Route(s) of Entry** Skin contact. Inhalation.

#### Signs and Symptoms of Acute Exposure

<b>Inhalation</b>	Breathing high concentrations may be harmful. Mist or vapor can irritate the throat and lungs. Breathing this material may cause central nervous system depression with symptoms including nausea, headache, dizziness, fatigue, drowsiness, or unconsciousness.
<b>Eye Contact</b>	This material can cause eye irritation with tearing, redness, or a stinging or burning feeling. Further, it can cause swelling of the eyes with blurred vision. Effects may become more serious with repeated or prolonged contact.
<b>Skin Contact</b>	This material can cause skin irritation. Symptoms include redness, itching, and burning of the skin. This material can be absorbed by the skin and produce central nervous system depression (headache, nausea, fatigue and/or other symptoms including unconsciousness). If the skin is damaged, absorption increases. Prolonged and/or repeated contact may cause severe dermatitis and/or more serious skin disorders. Chronic symptoms may include drying, swelling, scaling, blistering, cracking, and/or severe tissue damage.
<b>Ingestion</b>	If swallowed, this material may irritate the mouth, throat, and esophagus. It can be absorbed into the blood stream through the stomach and intestinal tract. Symptoms may include a burning sensation of the mouth and esophagus, nausea and vomiting. In addition, it can cause central nervous system effects characterized by dizziness, staggering, drowsiness, delirium and/or loss of consciousness.

Because of the low viscosity, this material can enter the lungs directly by aspiration during swallowing or subsequent vomiting. Aspiration of a small amount of liquid can cause severe lung damage and/or death.

**Chronic Health Effects Summary** Secondary effects of ingestion and subsequent aspiration into the lungs may cause pneumatocele (lung cavity) formation and chronic lung dysfunction.

This product contains petroleum middle distillates similar to those shown to produce skin tumors on laboratory rodents following repeated application. All tumors appeared during the latter portion of the typical 2-year lifespan of the animals. Certain studies have shown that washing the exposed skin of the test animal with soap and water between treatments greatly reduces the potential tumorigenic effects. These data suggest that good personal hygiene is effective in reducing the risk of this potential adverse health effect.

This material and/or its components have been associated with developmental toxicity, reproductive toxicity, genotoxicity, immunotoxicity, and/or carcinogenicity. Refer to Section 11 of this MSDS for additional health-related information.

**Conditions Aggravated by Exposure** Disorders of the following organs or organ systems that may be aggravated by significant exposure to this material or its components include: Skin, Respiratory System, Liver, Kidneys, Central Nervous System (CNS)

**Target Organs** May cause damage to the following organs: kidneys, lungs, liver, mucous membranes, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea

**Carcinogenic Potential**

## CITGO No. 2 Diesel Fuel, Low Sulfur, All Grades

This material may contain ethylbenzene and naphthalene at concentrations above 0.1%. IARC has identified ethylbenzene and naphthalene as possibly carcinogenic to humans (Group 2B) based on laboratory animal studies. The NTP has determined that naphthalene is *reasonably anticipated to be a human carcinogen* based on sufficient evidence from studies in experimental animals. NTP has determined that exposure to diesel exhaust particulates, a complex mixture of combustion products of diesel fuel, is reasonably anticipated to be a human carcinogen.

OSHA Hazard Classification is indicated by an "X" in the box adjacent to the hazard title. If no "X" is present, the product does not exhibit the hazard as defined in the OSHA Hazard Communication Standard (29 CFR 1910.1200).

OSHA Health Hazard Classification				OSHA Physical Hazard Classification			
Irritant	<input checked="" type="checkbox"/>	Sensitizer	<input type="checkbox"/>	Combustible	<input checked="" type="checkbox"/>	Explosive	<input type="checkbox"/>
Toxic	<input type="checkbox"/>	Highly Toxic	<input type="checkbox"/>	Flammable	<input type="checkbox"/>	Oxidizer	<input type="checkbox"/>
Corrosive	<input type="checkbox"/>	Carcinogenic	<input type="checkbox"/>	Compressed Gas	<input type="checkbox"/>	Organic Peroxide	<input type="checkbox"/>
						Pyrophoric	<input type="checkbox"/>
						Water-reactive	<input type="checkbox"/>
						Unstable	<input type="checkbox"/>

## SECTION 4. FIRST AID MEASURES

Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid. For more specific information, refer to Exposure Controls and Personal Protection in Section 8 of this MSDS.

### Inhalation

Move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If breathing is difficult, 100 percent humidified oxygen should be administered by a qualified individual. Seek medical attention immediately. Keep the affected individual warm and at rest.

### Eye Contact

Check for and remove contact lenses. Flush eyes with cool, clean, low-pressure water for at least 15 minutes while occasionally lifting and lowering eyelids. Do not use eye ointment unless directed to by a physician. Seek medical attention if excessive tearing, irritation, or pain persists.

### Skin Contact

Remove contaminated shoes and clothing. Flush affected area with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. Do not use ointments. If skin surface is not damaged, clean affected area thoroughly with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists.

### Ingestion

Do not induce vomiting. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. Never give anything by mouth to a person who is not fully conscious. Do not leave victim unattended. Seek medical attention immediately.

### Notes to Physician

**INHALATION:** Inhalation overexposure can produce toxic effects. Monitor for respiratory distress. If cough or difficulty in breathing develops, evaluate for upper respiratory tract inflammation, bronchitis, and pneumonitis. Administer supplemental oxygen with assisted ventilation, as required.

**INGESTION:** If ingested, this material presents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended. Consider activated charcoal and/or gastric lavage. If patient is obtunded, protect the airway by cuffed endotracheal intubation or by placement of the body in a Trendelenburg and left lateral decubitus position.

## SECTION 5. FIRE FIGHTING MEASURES

<b>NFPA Flammability Classification</b>	NFPA Class-II combustible liquid.		
<b>Flash Point</b>	Closed cup: AP 52°C (AP 125°F). (Pensky-Martens.)		
<b>Lower Flammable Limit</b>	AP 0.6 %	<b>Upper Flammable Limit</b>	AP 7.5 %
<b>Autoignition Temperature</b>	>254°C (>489°F)		
<b>Hazardous Combustion Products</b>	Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons and oxides of sulfur and nitrogen.		
<b>Special Properties</b>	Combustible Liquid! This material releases vapors when heated above ambient temperatures. Vapors can cause a flash fire. Vapors can travel to a source of ignition and flashback. A vapor and air mixture can create an explosion hazard in confined spaces such as sewers. Use only with adequate ventilation. If container is not properly cooled, it can rupture in the heat of a fire.		
<b>Extinguishing Media</b>	<b>SMALL FIRE:</b> Use dry chemicals, carbon dioxide, foam, or inert gas (nitrogen). Carbon dioxide and inert gas can displace oxygen. Use caution when applying carbon dioxide or inert gas in confined spaces. <b>LARGE FIRE:</b> Use foam, water fog, or water spray. Water fog and spray are effective in cooling containers and adjacent structures. However, water can cause frothing and/or may not extinguish the fire. Water can be used to cool the external walls of vessels to prevent excessive pressure, autoignition or explosion. DO NOT use a solid stream of water directly on the fire as the water may spread the fire to a larger area.		
<b>Protection of Fire Fighters</b>	Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles. Cover pooling liquid with foam. Containers can build pressure if exposed to radiant heat; cool adjacent containers with flooding quantities of water until well after the fire is out. Withdraw immediately from the area if there is a rising sound from a venting safety device or discoloration of vessels, tanks, or pipelines. Be aware that burning liquid will float on water. Notify appropriate authorities of potential fire and explosion hazard if liquid enter sewers or waterways.		

## SECTION 6. ACCIDENTAL RELEASE MEASURES

Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For more specific information, refer to the Emergency Overview on Page 1, Exposure Controls and Personal Protection in Section 8 and Disposal Considerations in Section 13 of this MSDS.

Combustible Liquid! Release can result in a fire hazard. Evacuate all non-essential personnel from release area. Establish a regulated zone with site control and security. Eliminate all ignition sources. Stop the leak if it can be done without risk. A vapor-suppressing foam may be used to reduce vapors. Properly bond or ground all equipment used when handling this material. Avoid skin contact. Do not walk through spilled material. Verify that responders are properly trained and wearing appropriate personnel protective equipment. Dike far ahead of a liquid spill. Do not allow released material to enter waterways, sewers, basements, or confined areas. This material will float on water. Absorb or cover with dry earth, sand or other non-combustible material. Use clean, non-sparking tools to collect absorbed material. Place spent sorbent materials, free liquids and other clean-up debris into proper waste containers for appropriate disposal. Certain releases must be reported to the National Response Center (800/424-8802) and state or regulatory authorities. Comply with all laws and regulations.



## SECTION 7. HANDLING AND STORAGE

### Handling

#### Combustible Liquid!

A static electrical charge can accumulate when this material is flowing through pipes, nozzles or filters and when it is agitated. A static spark discharge can ignite accumulated vapors particularly during dry weather conditions. Always bond receiving containers to the fill pipe before and during loading. Always keep nozzle in contact with the container throughout the loading process. Do not fill any portable container in or on a vehicle. Special precautions, such as reduced loading rates and increased monitoring, must be observed during "switch loading" operations (i.e., loading this material in tanks or shipping compartments that previously containing gasoline or similar low flash point products).

Fire hazard increases as product temperature approaches its flash point. Keep container closed and drum bungs in place. Remove spillage immediately from walking areas. Do not handle or store near heat, sparks or other potential ignition sources. Do not handle or store with oxidizing agents. Avoid breathing mist or vapor. Never siphon by mouth. Do not taste or swallow. Avoid contact with eyes, skin and clothing. Use gloves constructed of impervious materials and protective clothing if direct contact is anticipated. Provide ventilation to maintain exposure potential below applicable exposure levels. Avoid water contamination. Wash thoroughly after handling. Prevent contact with food or tobacco products.

When performing repairs and maintenance on contaminated equipment, keep unnecessary persons from hazard area. Eliminate heat, flame and other potential ignition sources. Drain and purge equipment, as necessary, to remove material residues. Remove contaminated clothing. Wash exposed skin thoroughly with soap and water after handling.

Do not use this material as fuel for equipment, such as portable heaters, in enclosed areas. Hazardous combustion products can cause death.

Protect the environment from releases of this material. Prevent discharges to surface waters and groundwater. Maintain handling, transfer and storage equipment in proper working order.

Misuse of empty containers can be dangerous. Empty containers may contain material residues which can ignite with explosive force. **Cutting or welding of empty containers can cause fire, explosion, or release of toxic fumes from residues.** Do not pressurize or expose empty containers to open flame, sparks, or heat. Keep container closed and drum bungs in place. All label warnings and precautions must be observed. Return empty drums to a qualified reconditioner. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling, or disposing of empty containers and/or waste residues of this material.

### Storage

Store in a cool, dry, well-ventilated place. Keep containers tightly closed. Do not store this product near heat, flame or other potential ignition sources. Do not store with oxidizers. Do not store this product in unlabeled containers. Do not puncture or incinerate containers. Ground all equipment containing this material. All electrical equipment in areas where this material is stored or handled must meet all applicable requirements of the NFPA's National Electrical Code (NEC). Store and transport in accordance with all applicable laws.

## SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Engineering Controls

Provide ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below. All electrical equipment should comply with the National Electric Code. An emergency eye wash station and safety shower should be located near the work-station.

### Personal Protective Equipment

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. The following pictograms represent the minimum requirements for personal protective equipment. For certain operations, additional PPE may be required.

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<b>Eye Protection</b>	Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Chemical goggles should be worn during transfer operations or when there is a likelihood of misting, splashing, or spraying of this material. A suitable emergency eye wash water and safety shower should be located near the work station.
<b>Hand Protection</b>	Avoid skin contact. Use heavy duty gloves constructed of chemical resistant materials such as Viton® or heavy nitrile rubber. Wash hands with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities or leaving work. DO NOT use gasoline, kerosene, solvents or harsh abrasives as skin cleaners.
<b>Body Protection</b>	Avoid skin contact. Wear long-sleeved fire-retardant garments (e.g., Nomex®) while working with flammable and combustible liquids. Additional chemical-resistant protective gear may be required if splashing or spraying conditions exist. This may include an apron, boots and additional facial protection. If product comes in contact with clothing, immediately remove soaked clothing and shower. Promptly remove and discard contaminated leather goods.
<b>Respiratory Protection</b>	Airborne concentration will determine the level of respiratory protection required. Respiratory protection is normally not required unless the product is heated or misted. For known or anticipated vapor or mist concentrations above the occupational exposure guidelines (see below), use a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter if adequate protection is provided. Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).
<b>General Comments</b>	Warning! Use of this material in spaces without adequate ventilation may result in generation of hazardous levels of combustion products and/or inadequate oxygen levels for breathing. Odor is an inadequate warning for hazardous conditions.

### Occupational Exposure Guidelines

<b>Substance</b>	<b>Applicable Workplace Exposure Levels</b>
Nonane, all isomers	<b>ACGIH (United States).</b> TWA: 200 ppm 8 hour(s). Not available.
Ethylmethylbenzene, all isomers Trimethylbenzenes, all isomers	<b>ACGIH (United States).</b> TWA: 25 ppm 8 hour(s). <b>ACGIH (United States). Skin</b> TWA: 10 ppm 8 hour(s). STEL: 15 ppm 15 minute(s).
Naphthalene	<b>OSHA (United States).</b> TWA: 10 ppm 8 hour(s). <b>ACGIH (United States).</b> TWA: 50 ppm 8 hour(s). <b>OSHA (United States). Skin</b> TWA: 50 ppm 8 hour(s).
Cumene	<b>OSHA (United States).</b> TWA: 50 ppm 8 hour(s). Not available.
n-Propylbenzene 1, 2, 4 Trimethylbenzene Ethylbenzene	<b>Not available.</b> <b>ACGIH (United States).</b> TWA: 100 ppm 8 hour(s). STEL: 125 ppm 15 minute(s). <b>OSHA (United States).</b> TWA: 100 ppm 8 hour(s). <b>ACGIH (United States).</b> TWA: 100 ppm 8 hour(s). STEL: 150 ppm 15 minute(s). <b>OSHA (United States).</b> TWA: 100 ppm 8 hour(s).
Xylene, all isomers	<b>Not available.</b>
Diesel exhaust particulate	<b>Not available.</b>

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Benzene	<b>ACGIH (United States). Skin</b> TWA: 0.5 ppm 8 hour(s). STEL: 2.5 ppm 15 minute(s). <b>OSHA (United States). Skin Notes:</b> See Table Z-2 for exclusions in 20 CFR 1910.1028 to the PEL. TWA: 1 ppm 8 hour(s). STEL: 5 ppm 15 minute(s).
Toluene	<b>ACGIH (United States). Skin</b> TWA: 20ppm 8 hour(s). <b>OSHA (United States).</b> TWA: 200 ppm 8 hour(s). CEIL: 300 ppm PEAK: 500 ppm
Middle distillates, petroleum Straight-run middle distillate (petroleum)	Not available. <b>ACGIH (United States, 1998). Skin</b> TWA: 100 mg/m <sup>3</sup>
Distillates, petroleum, light catalytic cracked Kerosene	Not available. <b>NIOSH REL (United States).</b> TWA: 100 mg/m <sup>3</sup> 8 hour(s).
Hydrosulfurized middle distillate (petroleum) Hydrosulfurized Kerosine (Petroleum)	Not available. Not available.
Distillates, petroleum, hydrosulfurized light catalytic cracked Diesel Fuel No. 2	Not available. <b>ACGIH TLV (United States). Skin</b> TWA: 100 mg/m <sup>3</sup> 8 hour(s).

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES (TYPICAL)

<b>Physical State</b>	Liquid.	<b>Color</b>	Transparent, clear to yellow or red.	<b>Odor</b>	Characteristic, kerosene-like.
<b>Specific Gravity</b>	AP 0.84 (Water = 1)	<b>pH</b>	Not Applicable.	<b>Vapor Density</b>	AP 5 (Air = 1)
<b>Boiling Range</b>	154° C (309° F) to 371° C (700° F)			<b>Melting/Freezing Point</b>	Not available.
<b>Vapor Pressure</b>	<0.3 kPa (<2 mm Hg) (at 20°C)			<b>Volatility</b>	840 g/l VOC (w/v)
<b>Solubility in Water</b>	Very slightly soluble in cold water. (<0.1 % w/w)			<b>Viscosity (cSt @ 40°C)</b>	AP 3
<b>Flash Point</b>	Closed cup: AP 52°C (AP 125°F). (Pensky-Martens.)				
<b>Additional Properties</b>	Density = AP 7.0 lbs/gal. Viscosity (ASTM D2161) = 30 - 40 SUS @ 100° F				

## SECTION 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable.	<b>Hazardous Polymerization</b>	Not expected to occur.
<b>Conditions to Avoid</b>	Keep away from all ignition sources and strong oxidizing conditions.		
<b>Materials Incompatibility</b>	Strong acids, alkalies, and oxidizers such as liquid chlorine, other halogens, hydrogen peroxide and oxygen.		
<b>Hazardous Decomposition Products</b>	No additional hazardous decomposition products were identified other than the combustion products identified in Section 5 of this MSDS.		



## SECTION 11. TOXICOLOGICAL INFORMATION

For other health-related information, refer to the Emergency Overview on Page 1 and the Hazards Identification in Section 3 of this MSDS.

### Toxicity Data

#### Diesel Fuel, No. 2

ORAL LD50, Acute: 12,000 to 17,500 mg/kg or 9.0 ml/kg [Rat]

DERMAL LD50, Acute: >5.0 ml/kg [Rabbit screen level].

DRAIZE EYE, Acute: Mild irritant [Rabbit]

DRAIZE DERMAL, Acute: Severe skin irritant [Rabbit].

BUEHLER DERMAL, Acute: Non-sensitizing [Guinea Pig]

14-Day DERMAL, Sub-chronic: 0% and 67% mortality at 4.0 and 8.0 ml/kg [Rabbit]

62-Week DERMAL, Chronic: 0.05 ml/kg 3x/week [Mouse] - Extreme skin irritation.

97-Week DERMAL, Chronic: 243 g/kg applied 3x/week [Mouse] - Extreme skin irritation.

Moderate increase in contact-point skin tumors.

#### MUTAGENICITY:

Modified Ames Assay: Negative. [Salmonella typhimurium]

In-vitro SCE Ovary Assay: Negative. [Chinese Hamster]

In-vitro Lymphoma Assay: Negative. [Mouse]

In-vivo Dominant Lethal Assay: Negative. [Mouse]

In-vivo Bone Marrow Assay: Clastogenic at 2.0 ml/kg and 6.0 ml/kg [Rat]

#### Diesel exhaust particulate

Lung tumor and lymphomas were identified in rats and mice exposed to unfiltered diesel fuel exhaust in chronic inhalation studies. Further, epidemiological studies have identified increase incidences of lung cancer in US railroad workers and bladder cancer in bus and truck drivers possibly associated with exposure to diesel engine exhaust. NTP has determined that exposure to diesel exhaust particulates, a complex mixture of combustion products of diesel fuel, is reasonably anticipated to be a human carcinogen. In addition, NIOSH has identified complete diesel exhaust as a potential carcinogen.

#### Trimethylbenzenes, all isomers

##### Studies of Workers:

Levels of total hydrocarbon vapors present in the breathing atmosphere of these workers ranged from 10 to 60 ppm. The TCLO for humans is 10 ppm, with somnolence and respiratory tract irritation noted.

##### Studies in Laboratory Animals:

In inhalation studies with rats, four of ten animals died after exposures of 2400 ppm for 24 hours. An oral dose of 5 mL/kg resulted in death in one of ten rats. Minimum lethal intraperitoneal doses were 1.5 to 2.0 mL/kg in rats and 1.13 to 12 mL/kg in guinea pigs. Mesitylene (1, 3, 5 Trimethylbenzene) inhalation at concentrations of 1.5, 3.0, and 6.0 mg/L for six hours was associated with dose-related changes in white blood cell counts in rats. No significant effects on the complete blood count were noted with six hours per day exposure for five weeks, but elevations of alkaline phosphatase and SGOT were observed. Central nervous system depression and ataxia were noted in rats exposed to 5,100 to 9,180 ppm for two hours.

#### Naphthalene

##### Studies in Humans Overexposed to Naphthalene:

Severe jaundice, neurotoxicity (kernicterus) and fatalities have been reported in young children and infants as a result of hemolytic anemia from over-exposure to naphthalene. Persons with Glucose 6-phosphate dehydrogenase (G6PD) deficiency are more prone to the hemolytic effects of naphthalene. Adverse effects on the kidney have also been reported from over-exposure to naphthalene but these effects are believed to be a consequence of hemolytic anemia, and not a direct effect.

##### Studies in Laboratory Animals:

Hemolytic anemia has been observed in laboratory animals exposed to naphthalene. Laboratory rodents exposed to naphthalene vapor for 2 years (lifetime studies) developed non-neoplastic and neoplastic tumors and inflammatory lesions of the nasal and respiratory

## CITGO No. 2 Diesel Fuel, Low Sulfur, All Grades

tract. Cataracts and other adverse effects on the eye have been observed in laboratory animals exposed to high levels of naphthalene. Findings from a large number of bacterial and mammalian cell mutation assays have been negative. A few studies have shown chromosomal effects (elevated levels of Sister Chromatid Exchange or chromosomal aberrations) *in vitro*.

### Ethylbenzene

Effects from Acute Exposure:

ORAL (LD50), Acute: 3,500 mg/kg [Rat].

DERMAL (LD50), Acute: 17,800 uL/kg [Rabbit].

INTRAPERITONEAL (LD50), Acute: 2,624 mg/kg [Rat].

Effects from Prolonged or Repeated Exposure:

Findings from a 2-year inhalation study in rodents conducted by NTP were as follows: Effects were observed only at the highest exposure level (750 ppm). At this level the incidence of renal tumors was elevated in male rats (tubular carcinomas) and female rats (tubular adenomas). Also, the incidence of tumors was elevated in male mice (alveolar and bronchiolar carcinomas) and female mice (hepatocellular carcinomas). IARC has classified ethyl benzene as "possibly carcinogenic to humans" (Group 2B). Studies in laboratory animals indicate some evidence of post-implantation deaths following high levels of maternal exposure. The relevance of these findings to humans is not clear at this time. Studies in laboratory animals indicate limited evidence of renal malformations, resorptions, and developmental delays following high levels of maternal exposure. The relevance of these findings to humans is not clear at this time. Studies in laboratory animals indicate some evidence of adverse effects on the liver, kidney, thyroid, and pituitary gland.

### Middle distillates, petroleum

Long-term repeated (lifetime) skin exposure to similar materials has been reported to result in an increase in skin tumors in laboratory rodents. The relevance of these findings to humans is not clear at this time.

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Freshwater Toxicity:

Concentration: 2400 ppm Exposure: 48 hrs. Species: Juven. Am. Shad ( *Squalius cephalus* ) Assay: TLM

Concentration: >127 ppm Exposure: 96 hrs. Species: Bluegill ( *Lepomis macrochirus* ) Assay: LC50

#### Saltwater Toxicity

Concentration: 10 ppm Exposure: 96 hrs. Species: Menhaden ( *Brevoortia patronus* ) Assay: LC50

Concentration: 10 ppm Exposure: 96 hrs. Species: Grass Shrimp Assay: LC50

### Environmental Fate

If spilled, this material will normally evaporate. Hydrocarbon components may contribute to atmospheric smog. If released to the subsoils, petroleum middle distillate fuels will strongly adsorb to soils. Groundwater should be considered as an exposure pathway. Liquid and vapor can migrate through the subsurface and preferential pathways (such as utility line backfill) to downgradient receptors.

Middle distillates are potentially toxic to freshwater and saltwater ecosystems. Distillate fuels will normally float on water. In stagnant or slow-flowing waterways, a hydrocarbon layer can cover a large surface area. As a result, this oil layer can limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway can cause a fish kill or create an anaerobic environment. Also, this coating action can also kill plankton, algae, and water birds.


## SECTION 13. DISPOSAL CONSIDERATIONS

Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.

Maximize material recovery for reuse or recycling. Recovered non-usable material may be regulated by US EPA as a hazardous waste due to its ignitibility (D001) and/or its toxic (D018) characteristics. In addition, conditions of use may cause this material to become a hazardous waste, as defined by Federal or State regulations. It is the responsibility of the user to determine if the material is a hazardous waste at the time of disposal. Transportation, treatment, storage, and disposal of waste material must be conducted in accordance with RCRA regulations (see 40 CFR Parts 260 through 271). Contact your regional US EPA office for guidance concerning case specific disposal issues. State and/or local regulations might be even more restrictive.

## SECTION 14. TRANSPORT INFORMATION

The shipping description below may not represent requirements for all modes of transportation, shipping methods or locations outside of the United States.

<b>US DOT Status</b>	A U.S. Department of Transportation (DOT) regulated material. The following U. S. DOT hazardous materials shipping description applies to bulk packaged material that is transported by highway or rail. Alternate shipping descriptions may be required for product transported by marine vessel, air or other method and for non-bulk packaged material.		
<b>Proper Shipping Name</b>	Diesel Fuel, Combustible liquid, NA1993, PG III		
<b>Hazard Class</b>	DOT Class: Combustible liquid with a flash point greater than 37.8°C (100°F).	<b>Packing Group</b>	III
		<b>UN/NA Number</b>	NA 1993
<b>Reportable Quantity</b>	A Reportable Quantity (RQ) has not been established for this material.		
<b>Placard(s)</b>		<b>Emergency Response Guide No.</b>	128
		<b>MARPOL III Status</b>	Not a DOT "Marine Pollutant" per 49 CFR 171.8.

## SECTION 15. REGULATORY INFORMATION

<b>TSCA Inventory</b>	This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.
<b>SARA 302/304 Emergency Planning and Notification</b>	The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.
<b>SARA 311/312 Hazard Identification</b>	The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories: fire, Acute (Immediate) Health Hazard, Chronic (Delayed) Health Hazard



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### SARA 313 Toxic Chemical Notification and Release Reporting

This product contains the following components in concentrations above *de minimis* levels that are listed as toxic chemicals in 40 CFR Part 372 pursuant to the requirements of Section 313 of SARA:

Naphthalene [CAS No.: 91-20-3] Concentration: 2%  
Ethylbenzene [CAS No.: 100-41-4] Concentration: 0.9%

### CERCLA

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances present in this product or refinery stream that may be subject to this statute are:

Naphthalene [CAS No.: 91-20-3] RQ = 100 lbs. (45.36 kg) Concentration: 2%  
Cumene [CAS No.: 98-82-8] RQ = 5000 lbs. (2268 kg) Concentration: 0.9%  
Ethylbenzene [CAS No.: 100-41-4] RQ = 1000 lbs. (453.6 kg) Concentration: 0.9%  
Xylene, all isomers [CAS No.: 1330-20-7] RQ = 100 lbs. (45.36 kg) Concentration: 0.9%  
Benzene [CAS No.: 71-43-2] RQ = 10 lbs. (4.536 kg) Concentration: 0.045%

### Clean Water Act (CWA)

This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

### California Proposition 65

This material may contain the following components which are known to the State of California to cause cancer, birth defects or other reproductive harm, and may be subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):

Diesel exhaust particulate  
Naphthalene: <2%  
Ethylbenzene: <1%  
Toluene: <0.1%  
Benzene: <0.1%

### New Jersey Right-to-Know Label

Diesel Fuel

### Additional Remarks

As minimum requirements, CITGO recommends that the following advisory information be displayed on equipment used to dispense diesel fuel. Additional warnings specified by various regulatory authorities may be required: **"Diesel Fuel DANGER: Combustible Liquid. Use as a Motor Fuel Only. DO NOT FILL CONTAINERS THAT HAVE PREVIOUSLY CONTAINED GASOLINE OR OTHER FLAMMABLE LIQUIDS. Sparks From static electricity can ignite flammable vapor residues. PLACE CONTAINER ON GROUND. DO NOT FILL ANY PORTABLE CONTAINER IN OR ON A VEHICLE. Containers must be metal or other material approved for storing diesel fuel. Keep nozzle spout in contact with the container during the entire filling operation. NO SMOKING! Do not leave nozzle unattended during filling. HARMFUL OR FATAL IF SWALLOWED** If swallowed, do not induce vomiting. Call Physician Immediately. Keep Out of Reach of Children. Avoid prolonged breathing of vapors. Never siphon by mouth. Do not store in vehicle or living space. Store and use in a well ventilated area. Do not use near heat, spark or flame. Keep container closed."

## SECTION 16. OTHER INFORMATION

Refer to the top of Page 1 for the HMIS and NFPA Hazard Ratings for this product.

### REVISION INFORMATION

Version Number 5.1  
Revision Date 12/31/2007

### ABBREVIATIONS

AP: Approximately EQ: Equal >: Greater Than <: Less Than NA: Not Applicable ND: No Data NE: Not Establishe

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ACGIH: American Conference of Governmental Industrial Hygienists

IARC: International Agency for Research on Cancer

NIOSH: National Institute of Occupational Safety and Health

NPCA: National Paint and Coating Manufacturers Association

NFPA: National Fire Protection Association

AIHA: American Industrial Hygiene Association

NTP: National Toxicology Program

OSHA: Occupational Safety and Health Administration

HMIS: Hazardous Materials Information System

EPA: US Environmental Protection Agency

### **DISCLAIMER OF LIABILITY**

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---

\*\*\*\*\* END OF MSDS \*\*\*\*\*

## Woodard, Dawn (DEQ)

---

**From:** James Kassouf [jkassouf@creqcc.com]  
**Sent:** Friday, March 04, 2011 11:38 AM  
**To:** Woodard, Dawn (DEQ)  
**Subject:** KCR Joint Venture Permit application 1 of 2  
**Attachments:** KCR VPDES Permit Application Final\_Part3.pdf; KCR VPDES Permit Application Final\_Part4.pdf; KCR VPDES Permit Application Final\_Part1.pdf

Dawn,

Please see the revised application attached. We will overnight an original to you.

Please let me know if there are any other issues encountered. We appreciate all of your assistance on this matter.

Attached Part 1, 3 and 4

Thank you for your time,

**James R. Kassouf**

Kassouf & Clinton Road Joint Venture  
11654 Plaza America Dr., # 177  
Reston, VA 20190  
(216) 409-7509 Mobile  
(216) 395-0101 Fax  
[JKassouf@CREQCC.com](mailto:JKassouf@CREQCC.com)



**-PROJECT-**

*Owner: Fairfax County Water Authority  
Title: Corbalis to Fox Mill 54" Water Main  
Project: 1859/4  
Contract No: 4500000646*

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## Woodard, Dawn (DEQ)

---

**From:** James Kassouf [jkassouf@creqcc.com]  
**Sent:** Friday, March 04, 2011 11:47 AM  
**To:** Woodard, Dawn (DEQ)  
**Subject:** KCR Joint Venture Permit application 2 of 2  
**Attachments:** KCR VPDES Permit Application Final\_Part2.pdf

This is email 2 of 2  
Attached Part 2

Thank you for your time,

**James R. Kassouf**

Kassouf & Clinton Road Joint Venture  
11654 Plaza America Dr., # 177  
Reston, VA 20190  
(216) 409-7509 Mobile  
(216) 395-0101 Fax  
[JKassouf@CREQCC.com](mailto:JKassouf@CREQCC.com)



**-PROJECT-**

*Owner: Fairfax County Water Authority  
Title: Corbalis to Fox Mill 54" Water Main  
Project: 1859/4  
Contract No: 4500000646*

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**RECEIVED**  
830397  
MAR 02 2011  
(e-mailed @ 8pm)  
03/31/11  
VA DEQ - NRO

**VPDES GENERAL PERMIT REGISTRATION STATEMENT  
FOR DISCHARGES FROM PETROLEUM CONTAMINATED SITES,  
GROUNDWATER REMEDIATION AND HYDROSTATIC TESTS (VAG83)**

*Please Type or Print all information*

1. Legal Name of Facility Corbalis to Fox Mill 54" Water Main - Work Site A
2. Location of Facility (Street No., Route No., or Other Identifier, and Telephone Number) South East Corner Of Fairfax Co. Pkwy & New Dominion Pkwy
3. Facility Owner Name (individual or corporate) Kassouf Co. & Clinton Road Joint Venture (KCR)  
  
Owner Address: 11654 Plaza America Dr. #177,  
Street or P.O. Box  

<u>Reston,</u> City	<u>VA</u> State	<u>20190</u> Zip
------------------------	--------------------	---------------------

  
Phone: (216) 409 - 7509 Email Address JKassouf@creqcc.com
4. Nature of the business conducted at the facility Utility Installation By Tunneling
5. Type of petroleum product(s) causing or that caused contamination. Machine Oil, Lubricating Grease, Hydraulic Oil, Motor Oil, Grease, Gear Oil, SEE ATTACHED MSDS SHEETS  
If chlorinated hydrocarbon solvents are the constituents of concern, list the chlorinated hydrocarbons present in water at the site.
6. Which activities will result in a point source discharge from the site? (Check all that apply)  

<input checked="" type="checkbox"/> Excavation Dewatering
<input type="checkbox"/> Purging Ground Water Monitoring Wells
<input type="checkbox"/> Aquifer Tests to Characterize Site Conditions
<input type="checkbox"/> Hydrostatic Tests of Petroleum Storage Tanks or Pipelines
<input type="checkbox"/> Hydrostatic Tests of Natural Gas Storage Tanks or Pipelines
<input type="checkbox"/> Pumping Contaminated Groundwater to Remove Free Product From The Ground
<input type="checkbox"/> Other Petroleum Product or Chlorinated Hydrocarbon Solvent Cleanup Activity
<input checked="" type="checkbox"/> (specify) <u>Mining Equipment Cooling activities (City Water Initial Source)</u>
7. Has a site characterization report for this site been submitted to the Department of Environmental Quality?  
Yes ☐ No ☒
8. Characterize or describe the wastewater to be discharged including the types of contaminants present in the wastewater. Provide analytical data. See Attached MSDS Sheets & Water Sample Test Results
9. Identify the discharge point and the waterbody into which the discharge will occur. Southeast Corner of Fairfax Co. Pkwy and New Dominion Pkwy into culvert under 7100 Run off into Sugarland Run Stream
10. How often will the discharge occur (e.g., daily, monthly, continuously)? Continuously
11. Estimate how long each discharge will last: NA hours or days
12. Estimate total volume of wastewater to be discharged: 2 mil Gal.





**INSTRUCTIONS FOR COMPLETING THE VPDES GENERAL PERMIT  
REGISTRATION STATEMENT FOR DISCHARGES FROM PETROLEUM CONTAMINATED  
SITES, GROUNDWATER REMEDIATION AND HYDROSTATIC TESTS (VAG83)**

---

**GENERAL**

A Registration Statement must be submitted to the Department of Environmental Quality (DEQ) in order for DEQ to consider a proposed discharge for coverage under the VPDES General Permit for Discharges from Petroleum Contaminated Sites, Groundwater Remediation and Hydrostatic Tests (VAG83). Discharges not associated with petroleum-contaminated water, hydrostatic tests, or chlorinated hydrocarbon-contaminated water are not eligible for coverage under this general permit.

To apply for coverage, an owner must file a complete Registration Statement with the Department. Any owner proposing a new discharge must file a complete registration statement at least 30 days prior to the date planned for commencing operation of the new discharge. Any owner of an existing discharge covered by an individual VPDES permit who is proposing to be covered under this general permit must file a registration statement at least 180 days prior to the expiration date of the individual VPDES permit. Any owner of an existing discharge not currently covered by a VPDES permit who is proposing to be covered under this general permit must file a complete registration statement as soon as possible.

**Items 1 and 2: FACILITY INFORMATION**

Give the name of the business or other entity that occupies the site where the discharge is proposed to occur. Provide either the street address or other information that will allow DEQ personnel to locate the site. Give a telephone number at the site so that DEQ can contact someone at the facility.

**Item 3: OWNER INFORMATION**

Provide the full name, street address and telephone numbers of the owner to whom the permit will be issued. This person, firm, public organization or other entity is the party responsible for the control of the facility's operation.

**Item 4: NATURE OF BUSINESS**

Give a brief statement as to what usual business activities are conducted at the site of contamination.

**Item 5. PRODUCTS CAUSING THE CONTAMINATION**

Provide information about the types of petroleum products or chlorinated hydrocarbons that have contaminated water at the site.

**Item 6: PROPOSED ACTIVITIES**

Select all of the categories that apply to this proposed discharge. If events at the facility will cause the discharge to change over time from one category to another, indicate all categories that are anticipated.

**Item 7: SITE CHARACTERIZATION**

Please indicate if a site characterization report (SCR) has been submitted to DEQ. NOTE: An SCR is required from the person responsible for conducting the release investigation and performing corrective action. If you are not the Responsible Person (RP), you are NOT required to submit an SCR.

**Item 8. WASTEWATER CHARACTERIZATION**

The person applying for coverage under this permit must characterize or provide information about the wastewater to be discharged including the types of contaminants present in the wastewater. This characterization must include analytical data.

**Item 9: DISCHARGE LOCATION**

Provide a narrative description of the point of discharge (e.g., northwest corner of intersection of First St. and Second Ave.) Give the name of the stream, lake, river, etc. that the discharge will go into (e.g., Unnamed Tributary to Clear Creek). If the discharge is to enter a storm drain, give the name of the owner of the storm drain system (e.g., Fairfax Co. storm drain inlet).

**Item s 10, 11, 12 and 13: DISCHARGE INFORMATION**

Provide estimates of the frequency at which the discharge will occur, the duration of the discharge and of the amount and flow rate of wastewater to be discharged.

**Item 14: TREATMENT WORKS DESIGN**

Attach a line drawing that traces the flow of wastewater from one treatment unit to the next. This drawing may be a sketch that shows, conceptually, what system will be used to treat wastewater so that it will meet the effluent quality requirements of the general permit. Identify all treatment technologies that will be employed at the facility.

**Item 15: TOPOGRAPHIC MAP**

The topographic map should be a copy of the USGS 7.5 minute quadrangle that encompasses the facility and the surrounding property for at least 1/2 mile in all directions. Maps other than the USGS quadrangle may be substituted if they provide at least the same level of detail. The required information should be clearly marked on the map. Information regarding public water supplies and private wells may be obtained from local health department officials.

**Item 16: CENTRAL WASTEWATER TREATMENT SYSTEM**

The owner should investigate the possibility of discharging to a central wastewater treatment system prior to requesting coverage under this general permit. If a central wastewater treatment system is in the vicinity, but access for this discharge is denied, make that statement in the space provided.

**Item s 17 and 18: PERMIT/POLLUTION COMPLAINT NUMBERS**

If the facility has already been permitted to discharge and has a discharge permit number, or if the facility is responsible for the release and DEQ has issued a Pollution Complaint Number for the site, fill in the appropriate blanks with the permit or pollution complaint number. In some instances the applicant should fill in both questions; in others only one question may apply.

**Item 19: HAZARDOUS WASTE STATEMENT**

Indicate "yes" or "no" in the blanks provided.

**Item 20. CERTIFICATION**

State statutes provide for severe penalties for submitting false information on this registration statement. State regulations require that the registration statement be signed as follows:

- a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
- b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
- c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.

# Exhibit A

## Emergency Response Report

### *Attachments*

1) USGS Maps.....	Pg 35
2) Site Diagram.....	Pg 38
3) Treatment System Diagram .....	Pg 40
4) Site Material Safety Data Sheets (MSDS) .....	Pg 42



# **KCR Joint Venture**

---

11654 Plaza America Drive, #177 Reston VA, 20190

---

## **Emergency Response Report**

**IR# 2011-N1934**

**Corbalis to Fox Mill Tunneling Operation Oil Discharge**

**12025T New Dominion Parkway  
Reston, VA 20190**

**Submitted to:**

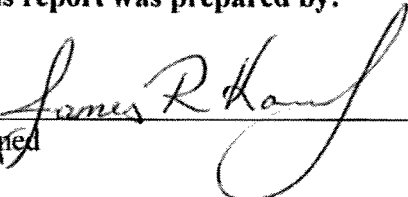
**VA DEQ, Northern Regional Office**

**Date: March 1<sup>st</sup>, 2011**



## Signature Page

This report was prepared by:

	James R. Kassouf
Signed	Name (Printed)
Kassouf Co & Clinton Road Joint Venture	March, 1 <sup>st</sup> , 2011
Company	Date
11654 Plaza America Drive # 177,	Reston , Virginia, 20190
Address, City, State, Zip	
(216) 409 – 7509	(216) 395 - 0101
Phone Number	Fax Number

## **Executive Summary**

KCR/Joint Venture is under contract to perform underground utility installation for Fairfax Water along Route 7100 in Fairfax County (Corbalis to Fox Mill Tunneling Operation). This project involves underground mining and excavation activities at a depth of approximately 45 feet for 8500 linear feet. The project is anticipated to last 18 months. The tunneling project involves the use of heavy equipment that utilizes hydraulic oils and petroleum lubricants during daily operation. The tunneling or boring equipment requires cooling during operation. Cooling is achieved by providing either city/county water or recycled water as the coolant. The tunneling operation also encounters spring and ground water. Together, these waters are pumped to the surface for discharge.

During initial start operations and fine tuning of equipment, hydraulic oils were released into the tunnel water and pumped to the surface where it was discharged through the silt/sediment control devices to an unnamed tributary of Sugarland Run adjacent to the construction activities.

On January 19, 2011 the release was discovered. KCR/Joint Venture, in response to Fairfax County Fire & Rescue and the VA DEQ, undertook measures to clean-up petroleum released from the site as well as implementing steps to prevent further release of petroleum product from the site. These activities are ongoing until at the present time and will continue until the site is discharging in accordance with a VPDES permit and all petroleum impacted soils have been excavated as detailed below.

KCR is implementing an on-site treatment system to eliminate petroleum from the discharge water. Initial steps include the addition of a sump in the excavation, installation of a sediment control box and an oil/water separator to prevent to discharge of free product. A system of bag filters and activated carbon filtration is currently being evaluated. A VPDES General Permit Resignation Statement is being submitted concurrent with this emergency response report. Initial water analysis of the discharge water from the oil/water separator is attached.

Upon implementation of a VPDES permit, KCR/Joint Venture will excavate petroleum impacted soils and gravel at the silt/sediment outfall. These impacted soils will be transported offsite for soil recycling at RECO Biotechnology in Richmond, VA. An initial composite soil sample for disposal has been analyzed for acceptance parameters into the disposal facility. The results are attached. Post-excavation soil analysis will be collected and analyzed to ensure that petroleum impacted soils have been properly removed.

A follow up report will be submitted documenting the final clean-up once the steps reference above have been completed.

## **General Site Information**

This project site is located at the follow GPS coordinates:

N 38°57'32.1  
W 077°22'10.8

The site is east of Route 7100 Northbound between the W&OD Trail and New Dominion Parkway. The Project site consists of a fenced gravel yard with office trails, storage containers, equipment lay down yard and the tunnel excavation opening.

Please see attached site diagram and topological maps.



## **Release Information and Initial Abatement Measures**

### **Release Description**

Hydraulic oil was released into the tunnel water during the initial start up and fine tuning of equipment. Tunnel water is defined here as the comingling of nature spring water, ground water and city water (used for equipment cleaning). Tunnel water, impacting with hydraulic oil, was pumped to the surface and discharged through the silt and sediment control devices and subsequently into an unnamed tributary of Sugarland Run. An estimated 40-60 gallons of petroleum product is suspected to have been released during the initial release. The quantity of oil release is based upon the estimated amount of oil used above and beyond the initial quantity necessary for equipment start up.

Ongoing operation of heavy equipment that utilizes hydraulic oil and petroleum lubricants in the tunneling operation creates a potential for ongoing/future contamination of tunnel water. This is due to cooling of equipment, general maintenance and incidentally failure of hydraulic lines/equipment during normal operation.

### **Initial Abatement Measures:**

The following actions have been implemented during initial abatement:

1. Mobilization of a vacuum truck to collect free product observed in tributary and around silt/sediment control devices.
2. Installation of approximately 8 layers of absorbent booms/sweep along the unnamed tributary. Installation of absorbent pads along silt and sediment control devices where free product has been observed. Currently these absorbents are checked, maintained and replaced as necessary on a bi-weekly basis.
3. Removal and replacement of initial silt bags and straw bales impacted with petroleum.
4. Installation of a sump inside the excavation/tunnel to facilitate the collection of free product prior to pumping tunnel water to the surface.
5. Installation of a sediment box (roughly 4,000 gallon) and an oil/water separator to collect free product in tunnel water after it is pumped to the surface.
6. Continued monitoring of oil/water separator and sediment box for the present of free product and utilization of a vacuum truck to collect and dispose of free product as necessary.
7. Copies of disposal manifests are attached.
8. KCR personnel working in the tunnel/excavation are receiving ongoing awareness training regarding the safe and clean operation and maintenance of equipment, specifically with regarding to the handling of petroleum products in the excavation.

## **Continuing and Plan Activities**

### **Water Management**

KCR/Joint is submitting a VPDES General Permit Registration Statement to receive a general discharge permit for the tunnel water. The Registration Statement is being submitted concurrent with this emergency response report. In addition to sump, sediment box and oil/water separator already installed, KCR is evaluating a system of bag filters and activated carbon filtration vessels to meet the discharge requirements of the VPDES permit. Initial water sample results are attached. The water sample was taken from the discharge tank on the oil/water separator and is representative of water for discharge post sump, post sediment box, post oil water separator, pre bag filters.

Once the water treatment system is fully installed, the system will be monitored in accordance with the requirement of the VPDES permit.

### **Soil Management**

Once the water discharge system under a VPDES permit is installed at the site, the soils, gravel, and straw associated with the original silt/sediment control devices will be excavated, transported and disposed of at an offsite soil recycling facility for petroleum impacted soils.

Post excavation sampling will be conducted to confirm removal of the petroleum contamination in the affected area.

The site will be restored to the existing grades with clean fill and stone. The silt/sediment control devices will be restored as deemed necessary in light of the treatment system and the requirements of Fairfax County.

The absorbent booms and pads around the point of discharge and downstream will be maintained and replaced as necessary until the above water and soil management tasks have been completed. A follow up report documenting completion of these tasks will be submitted to the VA DEQ upon completion.

## **Attachments**

Attached please find the following documents:

1. Water Analysis Certificates
2. Composition Soil (for disposal) Analysis Certificates
3. Petroleum impacted water and debris Disposal Manifests



# **Analytical Report for**

**Atlas Environmental Services, LLC**

**Certificate of Analysis No.: 11021711**

**Project Manager: Paul Stoecklin**

**Project Name : KCR**

**Project Location: 7100 Herndon, VA**



**February 24, 2011**

**Phase Separation Science, Inc.**

**6630 Baltimore National Pike**

**Baltimore, MD 21228**

**Phone: (410) 747-8770**

**Fax: (410) 788-8723**

6630 BALTIMORE NATIONAL  
PIKE  
ROUTE 40 WEST  
BALTIMORE, MD 21228  
410-747-8770  
800-932-9047

**PHASE  
SEPARATION  
SCIENCE,  
INC.**



February 24, 2011

**Paul Stoecklin**  
**Atlas Environmental Services, LLC**  
P.O. Box 1490

Lorton, VA 22199-1490

Reference: PSS Work Order No: **11021711**  
Project Name: KCR  
Project Location: 7100 Herndon, VA

Dear Paul Stoecklin :

The attached Analytical and QC Summary lists the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Work Order numbered **11021711**.

All work reported herein has been performed in accordance with current NELAP standards referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual unless otherwise noted in the Case Narrative Summary. PSS is limited in liability to the actual cost of the sample analysis done.

PSS reserves the right to return any unused samples, extracts or related solutions. Otherwise, the samples are scheduled for disposal, without any further notice, on March 24, 2011. This includes any samples that were received with a request to be held but lacked a specific hold period. It is your responsibility to provide a written request defining a specific disposal date if additional storage is required. Upon receipt, the request will be acknowledged by PSS, thus extending the storage period.

This report shall not be reproduced except in full, without the written approval of an authorized PSS representative. A copy of this report will be retained by PSS for at least 10 years, after which time it will be disposed without further notice, unless prior arrangements have been made.

We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any que:

**Dan Prucnal**  
Laboratory Manager



**Sample Summary**  
**Client Name: Atlas Environmental Services, LLC**  
**Project Name: KCR**

**Project ID: N/A**

**Work Order Number: 11021711**

The following samples were received under chain of custody by Phase Separation Science (PSS) on 02/17/2011 at 01:15 pm

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
11021711-001	001	WATER	02/16/2011 15:00
11021711-002	002	WATER	02/16/2011 15:00
11021711-003	003	SOIL	02/16/2011 15:00

Please reference the Chain of Custody and Sample Receipt Checklist for specific container counts and preservatives. Any sample conditions not in compliance with sample acceptance criteria are described in Case Narrative Summary.

**Notes:**

1. The presence of common laboratory contaminants such as acetone, methylene chloride and phthalates, may be considered a possible laboratory artifact. Where observed, appropriate consideration of data should be taken.
2. The following analytical results are never reported on a dry weight basis: pH, flashpoint, moisture and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].

**Standard Flags/Abbreviations:**

- B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- C Results Pending Final Confirmation.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- Fail The result exceeds the regulatory level for Toxicity Characteristic (TCLP) as cited in 40 CFR 261.24 Table 1.
- J The target analyte was positively identified below the reporting limit but greater than the LOD.
- LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect. An LOD is analyte and matrix specific.
- ND Not Detected at or above the reporting limit.
- RL PSS Reporting Limit.
- U Not detected.



## **Case Narrative Summary**

**Client Name: Atlas Environmental Services, LLC**

**Project Name: KCR**

Project ID: N/A

Work Order Number: 11021711

---

Any holding time exceedances, deviations from the method specifications, regulatory requirements or variations to the procedures outlined in the PSS Quality Assurance Manual are outlined below.

**Sample Receipt:**

All sample receipt conditions were acceptable.

**NELAP accreditation was held for all analyses performed unless noted below. See [www.phaseonline.com](http://www.phaseonline.com) for complete PSS scope of accreditation.**

SW-846 9078



OFFICES:  
6630 BALTIMORE NATIONAL PIKE  
ROUTE 40 WEST  
BALTIMORE, MD 21228  
410-747-8770  
800-932-9047  
FAX 410-788-8723

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 11021711

Atlas Environmental Services, LLC, Lorton, VA

February 24, 2011

Project Name: KCR

Project Location: 7100 Herndon, VA

Sample ID: 001

Date/Time Sampled: 02/16/2011 15:00 PSS Sample ID: 11021711-001

Matrix: WATER

Date/Time Received: 02/17/2011 13:15

Purgeable Aromatics

Analytical Method: SW-846 8021B

Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Benzene	ND	ug/L	1		1	02/18/11	02/18/11 15:57	1035
Toluene	ND	ug/L	1		1	02/18/11	02/18/11 15:57	1035
Ethylbenzene	ND	ug/L	1		1	02/18/11	02/18/11 15:57	1035
m,p-Xylenes	ND	ug/L	2		1	02/18/11	02/18/11 15:57	1035
o-Xylene	ND	ug/L	1		1	02/18/11	02/18/11 15:57	1035
Methyl-t-butyl ether	ND	ug/L	1		1	02/18/11	02/18/11 15:57	1035
Naphthalene	2	ug/L	1		1	02/18/11	02/18/11 15:57	1035

Sample ID: 002

Date/Time Sampled: 02/16/2011 15:00 PSS Sample ID: 11021711-002

Matrix: WATER

Date/Time Received: 02/17/2011 13:15

Diesel/Oil Range Organics

Analytical Method: SW-846 8015 C

Preparation Method: 3510C

DF/HF - No. 2/diesel fuel and heavier fuel/oil patterns observed in sample.

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO/ORO (Diesel/Oil Range Organics)	8	mg/L	1	DF	10	02/21/11	02/21/11 14:32	1040

OFFICES:  
6630 BALTIMORE NATIONAL PIKE  
ROUTE 40 WEST  
BALTIMORE, MD 21228  
410-747-8770  
800-932-9047  
FAX 410-788-8723

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 11021711

Atlas Environmental Services, LLC, Lorton, VA

February 24, 2011

Project Name: KCR

Project Location: 7100 Herndon, VA

Sample ID: 003

Date/Time Sampled: 02/16/2011 15:00

PSS Sample ID: 11021711-003

Matrix: SOIL

Date/Time Received: 02/17/2011 13:15

% Solids: 65

Total Metals

Analytical Method: SW-846 6020 A

Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Arsenic	2.5	mg/kg	0.6		1	02/17/11	02/18/11 15:50	1033
Barium	82	mg/kg	2.9		1	02/17/11	02/18/11 15:50	1033
Cadmium	ND	mg/kg	2.9		1	02/17/11	02/18/11 15:50	1033
Chromium	34	mg/kg	2.9		1	02/17/11	02/18/11 15:50	1033
Lead	9.4	mg/kg	2.9		1	02/17/11	02/18/11 15:50	1033
Mercury	ND	mg/kg	0.12		1	02/17/11	02/18/11 15:50	1033
Selenium	ND	mg/kg	2.9		1	02/17/11	02/18/11 15:50	1033
Silver	ND	mg/kg	2.9		1	02/17/11	02/18/11 15:50	1033

Total Petroleum Hydrocarbons - DRO

Analytical Method: SW-846 8015 C

Preparation Method: 3550

DF/HF - No. 2/diesel fuel and heavier fuel/oil patterns observed in sample.

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	300	mg/kg	6	DF	1	02/21/11	02/21/11 19:27	1040

Purgeable Aromatics

Analytical Method: SW-846 8021B

Preparation Method: 5030

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Benzene	ND	ug/kg	2		1	02/17/11	02/17/11 16:27	1035
Toluene	ND	ug/kg	2		1	02/17/11	02/17/11 16:27	1035
Ethylbenzene	ND	ug/kg	2		1	02/17/11	02/17/11 16:27	1035
m,p-Xylenes	ND	ug/kg	3		1	02/17/11	02/17/11 16:27	1035
o-Xylene	ND	ug/kg	2		1	02/17/11	02/17/11 16:27	1035

Total Organic Halides (TOX)

Analytical Method: SW-846 9078

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Total Organic Halides (TOX)	ND	mg/kg	77		1	02/22/11	02/22/11 16:54	1022



**www.phaseonline.com**  
**email: info@phaseonline.com**

**PHASE SEPARATION SCIENCE, INC.**

[illegible]

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

The client (Client Name), by signing, or having client's agent sign, this "Sample Chain-of-Custody/Affidavit Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable fees if collection becomes necessary.



# Phase Separation Science, Inc

## Sample Receipt Checklist

Work Order #	11021711	Received By	Sara Dorr
Client Name	Atlas Environmental Services, LLC	Date Received	02/17/2011 01:15:00 PM
Project Name	KCR	Delivered By	Dial Courier
Project Number	N/A	Tracking No	Not Applicable
Disposal Date	03/24/2011	Logged In By	Sara Dorr

### Shipping Container(s)

No. of Coolers	1	Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	0
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No

### Documentation

COC agrees with sample labels?	Yes
Chain of Custody	Yes

Sampler Name	<u>Paul Stoecklin</u>
MD DW Cert. No.	<u>N/A</u>

### Sample Container

Appropriate for Specified Analysis?	Yes
Intact?	Yes
Labeled and Labels Legible?	Yes

Custody Seal(s) Intact?	Not Applicable
Seal(s) Signed / Dated	Not Applicable

Total No. of Samples Received 3

Total No. of Containers Received 5

### Preservation

Metals	(pH<2)	N/A
Cyanides	(pH>12)	N/A
Sulfide	(pH>9)	N/A
TOC, COD, Phenols	(pH<2)	N/A
TOX, TKN, NH3, Total Phos	(pH<2)	N/A
VOC, BTEX (VOA Vials Rcvd Preserved)	(pH<2)	Yes
Do VOA vials have zero headspace?		Yes

### Comments: (Any "No" response must be detailed in the comments section below.)

For any improper preservation conditions, list sample ID, preservative added (reagent ID number) below as well as documentation of any client notification as well as client instructions. Samples for pH, chlorine and dissolved oxygen should be analyzed as soon as possible, preferably in the field at the time of sampling. Samples which require thermal preservation shall be considered acceptable when received at a temperature above freezing to 6°C. Samples that are hand delivered on the day that they are collected may not meet these criteria but shall be considered acceptable if there is evidence that the chilling process has begun such as arrival on ice.

Samples Inspected/Checklist Completed By:

Sara Dorr

Date: 02/17/2011

PM Review and Approval:

Simon Crisp

Date: 02/17/2011



# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

## SHIPPING DOCUMENT

Date: Document# **A 010039**

Generator / Shipper: <b>KCR Joint Venture</b>		
US EPA ID#:		
Address: <b>11654 Plaza America Dr #177</b>		
City: <b>Reston</b>	State: <b>VA</b>	Zip: <b>20190</b>
Contact: <b>Jim Foley</b>	Phone: <b>216-409-3416</b>	
Site: <b>Construction Site</b>		
Address: <b>Rt 7100 At Woodbridge</b>		
City: <b>Reston</b>	State: <b>VA</b>	Zip:
Transporter No. 1: <b>Atlas Environmental Services, LLC</b>		
US EPA ID #:		Phone: <b>703-339-9770</b>
Transporter No. 2: <b>Atlas</b>		
US EPA ID #:		Phone:
Facility: <input checked="" type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079 <input type="checkbox"/> Other:		
Additional Information:  24 Hour Emergency Phone Number 703-339-9770		

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
1	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
	Sorbents, Oil
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5, or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	001 17	265	G	265	-	-	
2	004 18	200	P	-	4	-	
3							
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name: <b>Jim Foley</b>	Signature: <i>Jim Foley</i>	Month / Day / Year: <b>01/19/11</b>
Transporter 1 Acknowledgement of Receipt of Materials		
Type / Print Name: <b>LT Hartman</b>	Signature: <i>LT Hartman</i>	Month / Day / Year: <b>1/19/11</b>
Transporter 2 Acknowledgement of Receipt of Materials		
Type / Print Name:	Signature:	Month / Day / Year:

Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above.

Type / Print Name: <b>PAUL SPECKLER</b>	Signature: <i>Paul Speckler</i>	Month / Day / Year: <b>1/19/11</b>
--	------------------------------------	---------------------------------------

03/01/2011 RCRA 20 of 22

# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

## SHIPPING DOCUMENT

Date: 1/20/2011 Document# A 009913

Generator / Shipper: <b>KCR Joint Venture</b>	
US EPA ID#:	
Address: <b>11654 Para America Drive 177</b>	
City: <b>RESTON</b>	State: <b>VA</b> Zip: <b>20190</b>
Contact: <b>Jim Foley</b>	Phone:
Site: <b>Construction Site</b>	
Address: <b>7104 Near Spring St.</b>	
City: <b>Reston</b>	State: <b>VA</b> Zip:
Transporter No. 1: <b>ATLAS ENVIRONMENTAL SERVICES</b>	
US EPA ID #:	Phone:
Transporter No. 2:	
US EPA ID #:	Phone:
Facility: <input checked="" type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079 <input type="checkbox"/> Other:	
Additional Information:	
24 Hour Emergency Phone Number 703-339-9770	

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
1	Sorbents, Oil <b>Hydraulic</b>
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5, or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	2 BAG	40	POUNDS		40		Sorbent
2							
3							
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name: <b>Robert K. Overman</b>	Signature: <i>[Signature]</i>	Month / Day / Year
Transporter 1 Acknowledgement of Receipt of Materials		
Type / Print Name: <b>Paul Steckler</b>	Signature: <i>[Signature]</i>	Month / Day / Year <b>1/20/2011</b>
Transporter 2 Acknowledgement of Receipt of Materials		
Type / Print Name:	Signature:	Month / Day / Year

Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above.

Type / Print Name: <b>Paul Steckler</b>	03/01/2011 Signature: <i>[Signature]</i>	Month / Day / Year <b>1/20/2011</b>
--	---	--



# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

Date: 1/21/11 Document # A 008236

Generator/ Shipper:  
**ECR IV**

US EPA ID#:  
Address:  
City: State: Zip:

Contact: Phone:

Site:  
**Const. Site**

Address:  
**7100 Dulles Toll Rd**

City: State Zip:

Transporter No. 1: **ATLAS ENVIRONMENTAL**  
US EPA ID#: Phone:

Transporter No. 2:  
US EPA ID#: Phone:

Facility:  
**Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079**

☐ Other:

Additional Information:  
  
24 Hour Emergency Phone Number  
703-339-9770

## SHIPPING DOCUMENT

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water/Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
2	Oil, Water for Recycling
	Wastewater

### Non RCRA/Non DOT Regulated Materials, Solids

Line	Material
	Ash, Fly
	Debris, C&D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
1	Sorbents, Oil
	Other

### DOT Regulated/Non RCRA Materials-Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1, 2, 4, 5, or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers		Total Quantity	Unit Wt/Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
	No.	Type						
1	1	845	15	lbs				
2	1	TI	193	GAL	193			
3								
4								
5								
6								

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type/Print Name: Signature: Month/ Day/ Year:

Transporter 1 Acknowledgement of Receipt of Materials  
Type/Print Name: **D.J. Hartman** Signature: Month/ Day/ Year: **1/21/11**

Transporter 2 Acknowledgement of Receipt of Materials  
Type/Print Name: Signature: Month/ Day/ Year:

Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy area above.  
Type/Print Name: **Paul Stocillan** Signature: Month/ Day/ Year: **1/21/2011**

# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

## SHIPPING DOCUMENT

Date: 1/24/11 Document# A 009911

Generator/Shipper: KEL Joni Verrano		
US EPA ID#:		
Address:		
City:	State:	Zip:
Contact:		Phone:
Site: CONET		
Address: 7100 DULLES TR		
City: Lorton	State: VA	Zip:
Transporter No. 1: ATLAS ENVIRONMENTAL		
US EPA ID #:		Phone:
Transporter No. 2:		
US EPA ID #:		Phone:
Facility:		
<input type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079 <input type="checkbox"/> Other:		
Additional Information:		
24 Hour Emergency Phone Number 703-339-9770		

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
1	Oil, Water for Recycling
	Wastewater

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
2	Soil, Oil
	Sorbents, Diesel Fuel
	Sorbents, Oil
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5, or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	1 11	27	GAL				
2	2 1944	40					
3							
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name: KEL Joni Verrano	Signature: 	Month / Day / Year: 1/24/11
Transporter 1 Acknowledgement of Receipt of Materials		
Type / Print Name: Dorrian L	Signature: 	Month / Day / Year: 1/24/11
Transporter 2 Acknowledgement of Receipt of Materials		
Type / Print Name:	Signature:	Month / Day / Year:

Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above.		
Type / Print Name: Paul Stokely	Signature: 	Month / Day / Year: 1/24/11

03/01/2011 10:00 AM (72)



# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

## SHIPPING DOCUMENT

Date: 1/26/11 Document# A 009909

Generator / Shipper: KCR JOINT VENTURE	
US EPA ID#:	
Address: P.O. Box 100000	
City: Reston	State: VA Zip:
Contact:	Phone:
Site: CONSTRUCTION SITE	
Address: Rt 7100	
City: Reston	State: VA Zip:
Transporter No. 1: ATLAS ENV. SVCS	
US EPA ID#:	Phone:
Transporter No. 2:	
US EPA ID#:	Phone:
Facility: <input checked="" type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079 <input type="checkbox"/> Other:	
Additional Information:  24 Hour Emergency Phone Number 703-339-9770	

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
	Sorbents, Oil
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5, or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	002 BR	100	P	-	2	-	
2							
3							
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name: T. Curran	Signature: 	Month / Day / Year: 1/26/11
Transporter 1 Acknowledgement of Receipt of Materials		
Type / Print Name: T. Curran	Signature: 	Month / Day / Year: 1/26/11
Transporter 2 Acknowledgement of Receipt of Materials		
Type / Print Name:	Signature:	Month / Day / Year:

Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above.		
Type / Print Name: T. Curran	Signature: 	Month / Day / Year: 1/26/11

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# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

## SHIPPING DOCUMENT

Date: 1/25/11 Document# A 009912

Generator / Shipper: KCR Joint Venture		
US EPA ID#:		
Address:		
City:	State:	Zip:
Contact:		Phone:
Site: CONST. SITE		
Address: 7100 DOWLESS RD		
City:	State:	Zip:
Transporter No. 1: ATLAS ENVIRONMENTAL		
US EPA ID #:		Phone:
Transporter No. 2:		
US EPA ID #:		Phone:
Facility:		
<input checked="" type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079		
<input type="checkbox"/> Other:		
Additional Information:		
24 Hour Emergency Phone Number 703-339-9770		

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
	Oil, Water for Recycling
	Wastewater

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
1	Sorbents, Oil
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5, or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	3 100	60					
2							
3		2					
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name: KCR Joint Venture	Signature: 	Month / Day / Year: 1/25/11
Transporter 1 Acknowledgement of Receipt of Materials		
Type / Print Name: JL	Signature: 	Month / Day / Year: 1/25/11
Transporter 2 Acknowledgement of Receipt of Materials		
Type / Print Name:	Signature:	Month / Day / Year:

Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above.		
Type / Print Name: JL SPECKLE	Signature: 	Month / Day / Year: 1/25/11

# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

Date: 2/2/11 Document # A 009445

Generator/ Shipper: <i>KCR</i>		
US EPA ID#:		
Address:		
City:	State:	Zip:
Contact:	Phone:	
Site: <i>Cost S/S</i>		
Address: <i>7150/2107</i>		
City: <i>ATL</i>	State: <i>GA</i>	Zip:
Transporter No. 1: <i>Atlas Environmental</i>		
US EPA ID#:		Phone:
Transporter No. 2:		
US EPA ID#:		Phone:
Facility:		
<input checked="" type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079		
<input type="checkbox"/> Other:		
Additional Information:		
24 Hour Emergency Phone Number 703-339-9770		

## SHIPPING DOCUMENT

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water/Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
	Oil, Water for Recycling
	Wastewaters

### Non RCRA/ Non DOT Regulated Materials, Solids

Line	Material
	Ash, Fly
	Debris, C&D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
	Sorbents, Oil
	Other

### DOT Regulated/Non RCRA Materials-Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1, 2, 4, 5, or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers		Total Quantity	Unit Wt./Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
	No.	Type						
1	1	PT	51	S&C				
2	6	PAS	170	lbs				
3								
4								
5								
6								

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type/Print Name: <i>NUOST FOR CUBEWATER</i>	Signature: <i>[Signature]</i>	Month/ Day/ Year: <i>2/2/11</i>
Transporter 1 Acknowledgement of Receipt of Materials		
Type/Print Name: <i>[Signature]</i>	Signature: <i>[Signature]</i>	Month/ Day/ Year: <i>2/2/11</i>
Transporter 2 Acknowledgement of Receipt of Materials		
Type/Print Name:	Signature:	Month/ Day/ Year:
Discrepancy Indication Space		

Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy area above.		
Type/Print Name: <i>PAUL STOECKLIN</i>	Signature: <i>[Signature]</i>	Month/ Day/ Year: <i>2/2/11</i>

# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

Date: 7 FEB 11 Document # A 008700

Generator/ Shipper: <i>KCR Joint Venture</i>		
US EPA ID#:		
Address:		
City:	State:	Zip:
Contact:	Phone:	
Site: <i>7100 off Dulles Toll Rd Construction Site</i>		
Address:		
City: <i>RESTON</i>	State: <i>VA</i>	Zip:
Transporter No. 1: <i>Atlas Environmental Services</i>		
US EPA ID#:	Phone: <i>703.339.9771</i>	
Transporter No. 2:		
US EPA ID#:	Phone:	
Facility: <input checked="" type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079		
<input type="checkbox"/> Other:		
Additional Information:		
24 Hour Emergency Phone Number 703-339-9770		

## SHIPPING DOCUMENT

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water/Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
1	Oil, Water for Recycling
2	Wastewaters

### Non RCRA/ Non DOT Regulated Materials, Solids

Line	Material
	Ash, Fly
	Debris, C&D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
2	Sorbents, Oil
	Other

### DOT Regulated/Non RCRA Materials-Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1, 2, 4, 5, or 6) 3, NA 1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt./Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	1 IT	600	GALLONS	600	0	0	
2	6 Bag	6	Bag				
3							
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type/Print Name: <i>Agent for Generator</i>	Signature:	Month/Day/Year: <i>2/7/11</i>
Transporter 1 Acknowledgement of Receipt of Materials		
Type/Print Name: <i>DOWELL JASON</i>	Signature: <i>Jason Dowell</i>	Month/Day/Year: <i>2/7/2011</i>
Transporter 2 Acknowledgement of Receipt of Materials		
Type/Print Name:	Signature:	Month/Day/Year:
Discrepancy Indication Space		

Facility Owner or Operator's Certification of receipt of materials covered by this manifest except as noted in Discrepancy area above.		
Type/Print Name: <i>Paul J. Spach</i>	Signature: <i>Paul J. Spach</i>	Month/Day/Year: <i>2/7/2011</i>



# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

## SHIPPING DOCUMENT

Date: Document# **A** 010042

Generator / Shipper: <i>KCR Joint Venture</i>		
US EPA ID#:		
Address:		
City:	State:	Zip:
Contact:	Phone:	
Site: <i>Cole Spill Site</i>		
Address: <i>27100 W. O.D. Tracer</i>		
City:	State:	Zip:
Transporter No. 1: <i>Atlas Env. Serv.</i>		
US EPA ID#:	Phone: <i>703-339-9770</i>	
Transporter No. 2:		
US EPA ID#:	Phone:	
Facility: <input checked="" type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079 <input type="checkbox"/> Other:		
Additional Information:  24 Hour Emergency Phone Number 703-339-9770		

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
<i>2</i>	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
<i>1</i>	Sorbents, Oil
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5,or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	<i>004 BP</i>	<i>100</i>	<i>P</i>	<i>-</i>	<i>190</i>		
2	<i>001 TT</i>	<i>115</i>	<i>6</i>	<i>115</i>			
3							
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name: <i>SKASSOUF</i>	Signature: <i>[Signature]</i>	Month / Day / Year: <i>2/10/2011</i>
Transporter 1 Acknowledgement of Receipt of Materials		
Type / Print Name: <i>Dowell JASON</i>	Signature: <i>[Signature]</i>	Month / Day / Year: <i>FEB 10 2011</i>
Transporter 2 Acknowledgement of Receipt of Materials		
Type / Print Name:	Signature:	Month / Day / Year:
Discrepancy Indication Space		
Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above		
Type / Print Name: <i>PAUL STOECKER</i>	Signature: <i>[Signature]</i>	Month / Day / Year: <i>2/10/11</i>

# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

Date: 2/14/11 Document# A 009848

Generator / Shipper: <i>ECA</i>		
US EPA ID#:		
Address:		
City:	State:	Zip:
Contact:	Phone:	
Site: <i>Const. Site</i>		
Address: <i>7100/247</i>		
City: <i>Leesburg</i>	State: <i>VA</i>	Zip:
Transporter No. 1: <i>ATLAS Environmental</i>		
US EPA ID#:	Phone:	
Transporter No. 2:		
US EPA ID#:	Phone:	
Facility:		
<input type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079 <input type="checkbox"/> Other:		
Additional Information:		
24 Hour Emergency Phone Number 703-339-9770		

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
1	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
2	Sorbents, Oil
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5, or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	1 <i>PA</i>	<i>942</i>	<i>71</i>				
2	1 <i>PA</i>	<i>165</i>	<i>140</i>				
3							
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name: <i>[Signature]</i>	Signature: <i>[Signature]</i>	Month / Day / Year
Transporter 1 Acknowledgement / Receipt of Materials		
Type / Print Name: <i>[Signature]</i>	Signature: <i>[Signature]</i>	Month / Day / Year: <i>2/14/11</i>
Transporter 2 Acknowledgement of Receipt of Materials		
Type / Print Name:	Signature:	Month / Day / Year
Discrepancy Indication Space		
Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above.		
Type / Print Name: <i>[Signature]</i>	Signature: <i>[Signature]</i>	Month / Day / Year: <i>2/14/11</i>

# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

## SHIPPING DOCUMENT

Date: 2/17/11 Document# A 009920

Generator / Shipper: <b>KELL</b>		
US EPA ID#:		
Address:		
City:	State:	Zip:
Contact:	Phone:	
Site: <b>CONST. SITE</b>		
Address: <b>7100/2007</b>		
City: <b>RESTON</b>	State: <b>VA</b>	Zip:
Transporter No. 1: <b>KTUE ANIZONMONTAL</b>		
US EPA ID #:	Phone:	
Transporter No. 2:		
US EPA ID #:	Phone:	
Facility:		
<input checked="" type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079		
<input type="checkbox"/> Other:		
Additional Information:		
24 Hour Emergency Phone Number 703-339-9770		

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
1	Sorbents, Oil
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5, or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	4 BAG	100	lbs				
2							
3							
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name: <b>Jim Foley</b>	Signature:	Month / Day / Year
Transporter 1 Acknowledgement of Receipt of Materials		
Type / Print Name: <b>SEMAN</b>	Signature:	Month / Day / Year: <b>2/17/11</b>
Transporter 2 Acknowledgement of Receipt of Materials		
Type / Print Name:	Signature:	Month / Day / Year
Discrepancy Indication Space		
Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above.		
Type / Print Name: <b>Jim Foley</b>	Signature:	Month / Day / Year: <b>2/17/11</b>

ORIGINAL: RETURN TO GENERATOR

# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

Date: 2/22/11 Document# A 009846

Generator / Shipper: KCR		
US EPA ID#:		
Address:		
City:	State:	Zip:
Contact:		Phone:
Site: CONST. SITE		
Address: 7100/267		
City:	State:	Zip:
Transporter No. 1: ATLAS ENVIRONMENTAL		
US EPA ID #:		Phone:
Transporter No. 2:		
US EPA ID #:		Phone:
Facility: <input type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079 <input type="checkbox"/> Other:		
Additional Information:  24 Hour Emergency Phone Number 703-339-9770		

## SHIPPING DOCUMENT

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
1	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
1	Sorbents, Oil
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5, or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	1 TT	56	GAL				
2	3 BALS	60	lbs				
3							
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name: <i>JKASSOUF</i>	Signature: <i>JKASSOUF</i>	Month / Day / Year: 2/22/11
Transporter 1 Acknowledgement of Receipt of Materials		
Type / Print Name: <i>JKASSOUF</i>	Signature: <i>JKASSOUF</i>	Month / Day / Year: 2/22/11
Transporter 2 Acknowledgement of Receipt of Materials		
Type / Print Name:	Signature:	Month / Day / Year:
Discrepancy Indication Space		
Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above.		
Type / Print Name: <i>JKASSOUF</i>	Signature: <i>JKASSOUF</i>	Month / Day / Year: 2/22/11

03/01/2011 KCR JV Page 31 of 72  
ORIGINAL: RETURN TO GENERATOR



# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

Date: **25 FEB 11** Document# **A 009775**

Generator / Shipper: <b>KCR</b>		
US EPA ID#: <b>NOT REQUIRED</b>		
Address: <b>1100 FAIRFAX CD PKWY</b>		
City: <b>RESTON</b>	State: <b>VA</b>	Zip:
Contact:	Phone:	
Site: <b>SAME AS ABOVE</b>		
Address:		
City:	State:	Zip:
Transporter No. 1: <b>ATLAS ENVIRONMENTAL</b>		
US EPA ID #: <b>NOT REQUIRED</b> Phone: <b>703-339-9770</b>		
Transporter No. 2:		
US EPA ID #:		
Facility:		
<input checked="" type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079		
<input type="checkbox"/> Other:		
Additional Information: <b>#24</b>		
24 Hour Emergency Phone Number 703-339-9770		

## SHIPPING DOCUMENT

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
1	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
	Sorbents, Oil
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5,or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	1 11	3385	GAL	3385	—	—	
2							
3							
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name: <b>Joe [Signature]</b>	Signature: <b>[Signature]</b>	Month / Day / Year: <b>2/25/11</b>
Transporter 1 Acknowledgement of Receipt of Materials		
Type / Print Name: <b>DAVID FOUSI</b>	Signature: <b>[Signature]</b>	Month / Day / Year: <b>2/25/11</b>
Transporter 2 Acknowledgement of Receipt of Materials		
Type / Print Name:	Signature:	Month / Day / Year:
Discrepancy Indication Space		
Facility Owner or Operator: Certification of receipt of materials covered by this manifest, except as noted in Discrepancy above.		
Type / Print Name: <b>Joe [Signature]</b>	Signature: <b>[Signature]</b>	Month / Day / Year: <b>2/25/11</b>

# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

## SHIPPING DOCUMENT

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
	Sorbents, Oil
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5,or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Date: 2-25-11 Document# **A** 009805

Generator / Shipper:  
KCR

US EPA ID#: Not Required

Address:

City: State: Zip:

Contact: Phone:

Site:  
Water Main Construction Site

Address:  
Remedy City Plwy + Eldon St

City: Roxton State: VA Zip:

Transporter No. 1: Atlas Environmental

US EPA ID #: Not Req Phone: 703-339-9770

Transporter No. 2:

US EPA ID #: Phone:

Facility:  
☒ Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079  
☐ Other:

Additional Information:  
VF21

24 Hour Emergency Phone Number  
703-339-9770

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	<u>ONE</u> <u>55</u>	<u>2150</u>	<u>GAL</u>	<u>2150</u>			
2							
3							
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name: Jose Duran Signature: [Signature] Month / Day / Year

Transporter 1 Acknowledgement of Receipt of Materials

Type / Print Name: Dan Hernandez Signature: [Signature] Month / Day / Year 2-25-11

Transporter 2 Acknowledgement of Receipt of Materials

Type / Print Name: Signature: Month / Day / Year

Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above.

Type / Print Name: Jim Slocum Signature: [Signature] Month / Day / Year 2/25/11

# ATLAS

## Environmental Services, LLC

10139 Giles Run Road, Lorton, VA 22079  
Phone: 703-339-9770 Fax: 703-339-9771

## SHIPPING DOCUMENT

Date: Document# **A** 009993

Generator / Shipper: <b>KCR</b>		
US EPA ID#: <b>NOT REQUIRED</b>		
Address: <b>Rt 7100 @ OAD TRAIL</b>		
City:	State:	Zip:
Contact:	Phone:	
Site:		
Address:		
City:	State:	Zip:
Transporter No. 1: <b>Atlas Environmental Services</b>		
US EPA ID #: <b>NOT REQUIRED</b>		Phone: <b>703 339 9771</b>
Transporter No. 2:		
US EPA ID #:		Phone:
Facility:		
<input type="checkbox"/> Atlas Environmental Services, LLC, 10139 Giles Run Road, Lorton, Virginia 22079		
<input type="checkbox"/> Other:		
Additional Information:		
24 Hour Emergency Phone Number 703-339-9770		

### Non RCRA/Non DOT Regulated Material, Liquids

Line	Material
	Petroleum Impacted Water / Commercial Contact Water
	Diesel and Water for Recycling
	Glycols for Recycling
	Kerosene and Water for Recycling
	Mineral Oil for Recycling
	Oil for Recycling
1	Oil, Water for Recycling
	Wastewaters

### Non RCRA/Non DOT Regulated Material, Solids

Line	Material
	Ash, Fly
	Debris, C & D related
	Debris, Petroleum Impact, Specify:
	Drums, Empty
	Filters for Recycling, Petroleum Impacted:
	Sludge, Industrial
	Sludge, Oil
	Sludge, Tank Bottom
	Soil, Petroleum Impacted, Specify:
	Soil, Oil
	Sorbents, Diesel Fuel
	Sorbents, Oil
	Other

### DOT Regulated / Non, RCRA Materials - Liquids

Line	Material
	Gasoline Mixture 3, UN1203, PGII ERG #128 for Recycling
	Gasoline 3, UN1203, PGII ERG #128 for Recycling
	Fuel Oil (No. 1,2,4,5,or 6) 3, NA1993, PGII ERG #128
	Diesel Fuel 3, 1993 PGIII ERG #128
	Fuel, Aviation, Turbine Engine 3, UN1863, PGII ERG #128
	Kerosene, 3, UN 1223, PGIII, ERG #128
	Other

Line	Containers No. Type	Total Quantity	Unit Wt. / Vol.	Quantity Liquid	Quantity Solid	Quantity Sludge	Notes
1	1 TT	1000	GALLONS	1000			
2							
3							
4							
5							
6							

Generator's Certification: I certify the materials described above on this document are not subject to federal regulations for disposal of Hazardous Waste as defined by RCRA. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state, and local regulations.

Type / Print Name: <b>Jared Lente</b>	Signature:	Month / Day / Year: <b>2-25-11</b>
Transporter 1 Acknowledgement of Receipt of Materials		
Type / Print Name: <b>DWELL JASON</b>	Signature:	Month / Day / Year: <b>FEB 25 2011</b>
Transporter 2 Acknowledgement of Receipt of Materials		
Type / Print Name:	Signature:	Month / Day / Year:
Discrepancy Indication Space		
Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Discrepancy above.		
Type / Print Name: <b>Ann Spence</b>	Signature:	Month / Day / Year: <b>4/25/2011</b>

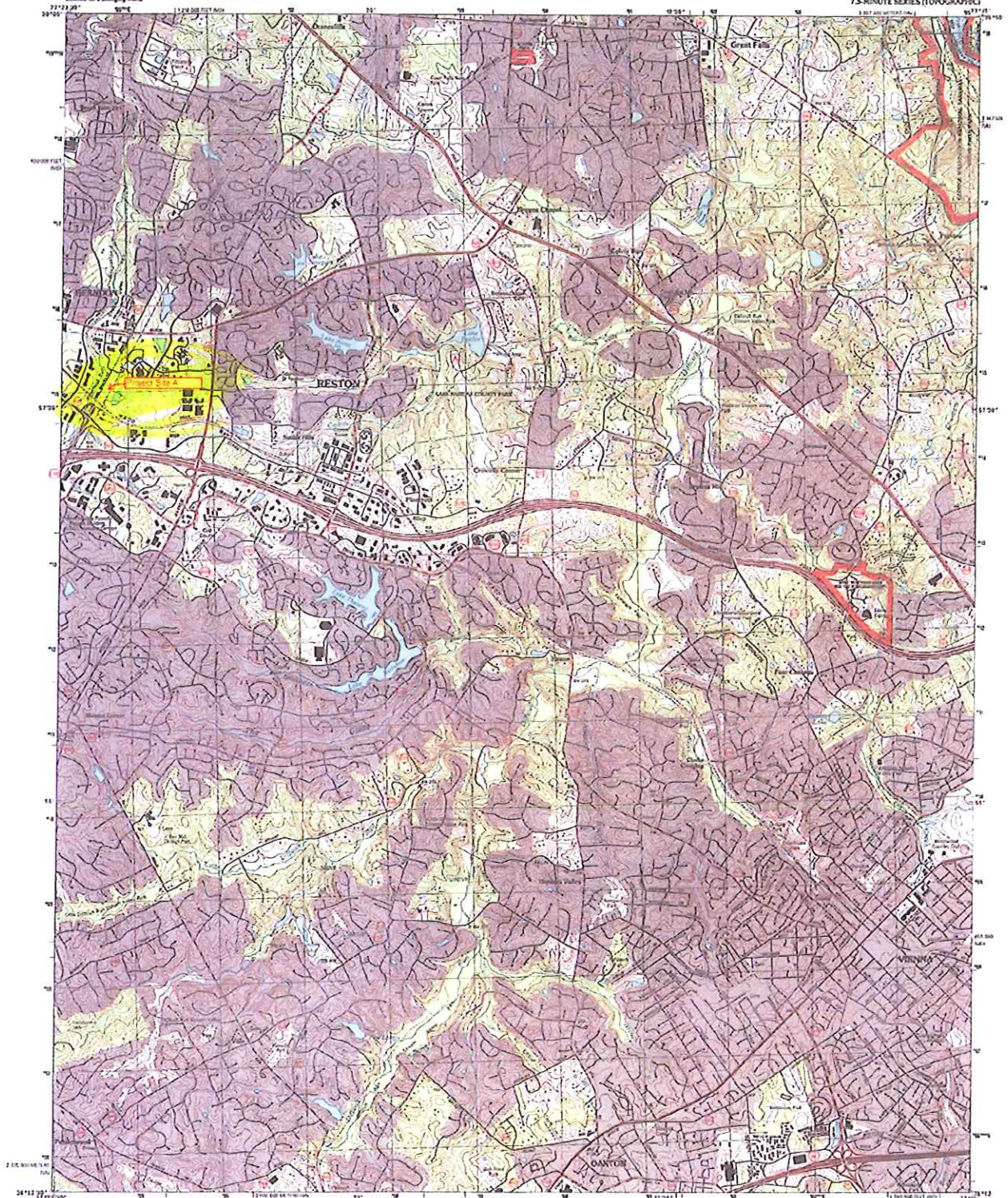
# USGS Maps





U.S. DEPARTMENT OF THE INTERIOR  
U.S. GEOLOGICAL SURVEY

VIENNA QUADRANGLE  
VIRGINIA-MARYLAND  
7.5-MINUTE SERIES (TOPOGRAPHIC)



Produced by the United States Geological Survey

Topographic edition 1958. Preliminary edition from inventory

before 1958. Survey material current as of 1953. Contours

not revised since 1953. Major roads are shown

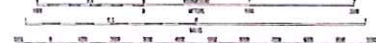
North American Datum of 1913 (NAD 13). Projection and

1:50,000 scale. U.S. Geological Survey, Reston, VA

Scale 1:50,000. U.S. Geological Survey, Reston, VA

These maps are printed on a special paper that is resistant

to water and fire. They are also resistant to fading.



SCALE 1:50,000

CONTOUR INTERVAL 10 FEET  
NATIONAL GEODESIC SURVEY DATUM OF 1913  
TO CORRELATE WITH THE NATIONAL DATUM OF 1983

FOR SALE BY U.S. GEOLOGICAL SURVEY, P.O. BOX 2418, DENVER, COLORADO 80201  
AND VIRGINIA DIVISION OF MINERAL RESOURCES, CHARLOTTEVILLE, VIRGINIA 22061



ROAD CLASSIFICATION

Primary highway  
Secondary highway  
Tertiary highway  
Unimproved road

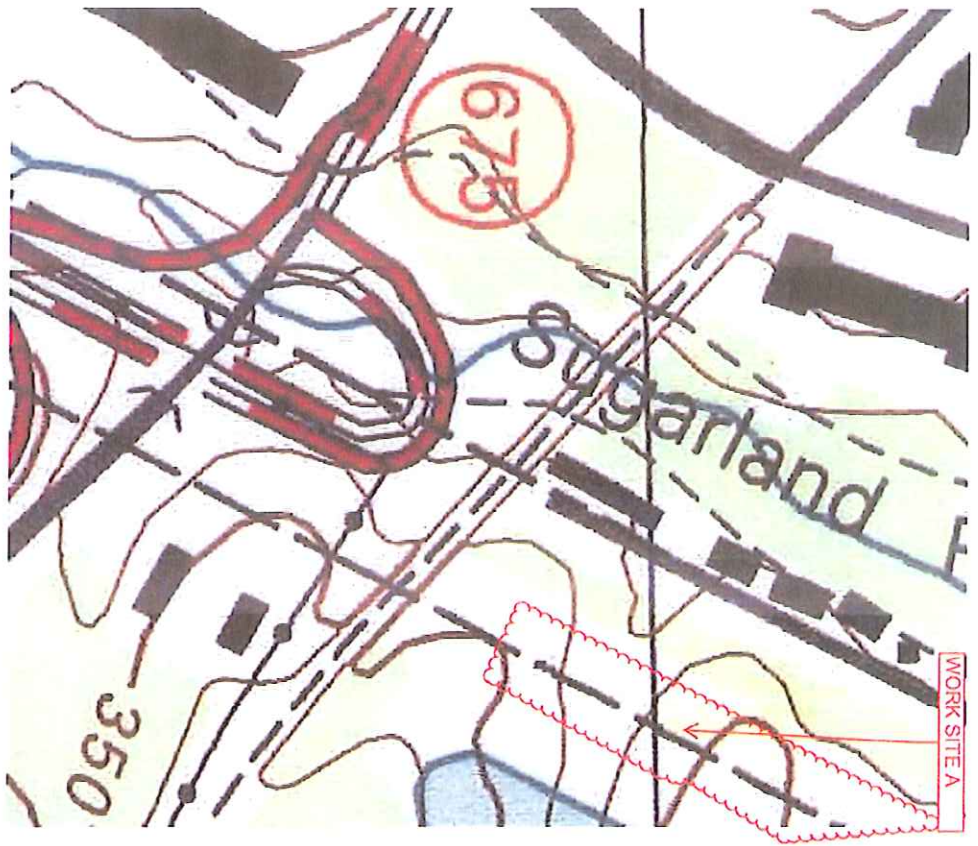
Interstate Route  
U.S. Route  
State Route

VIENNA, VA-MD  
1958

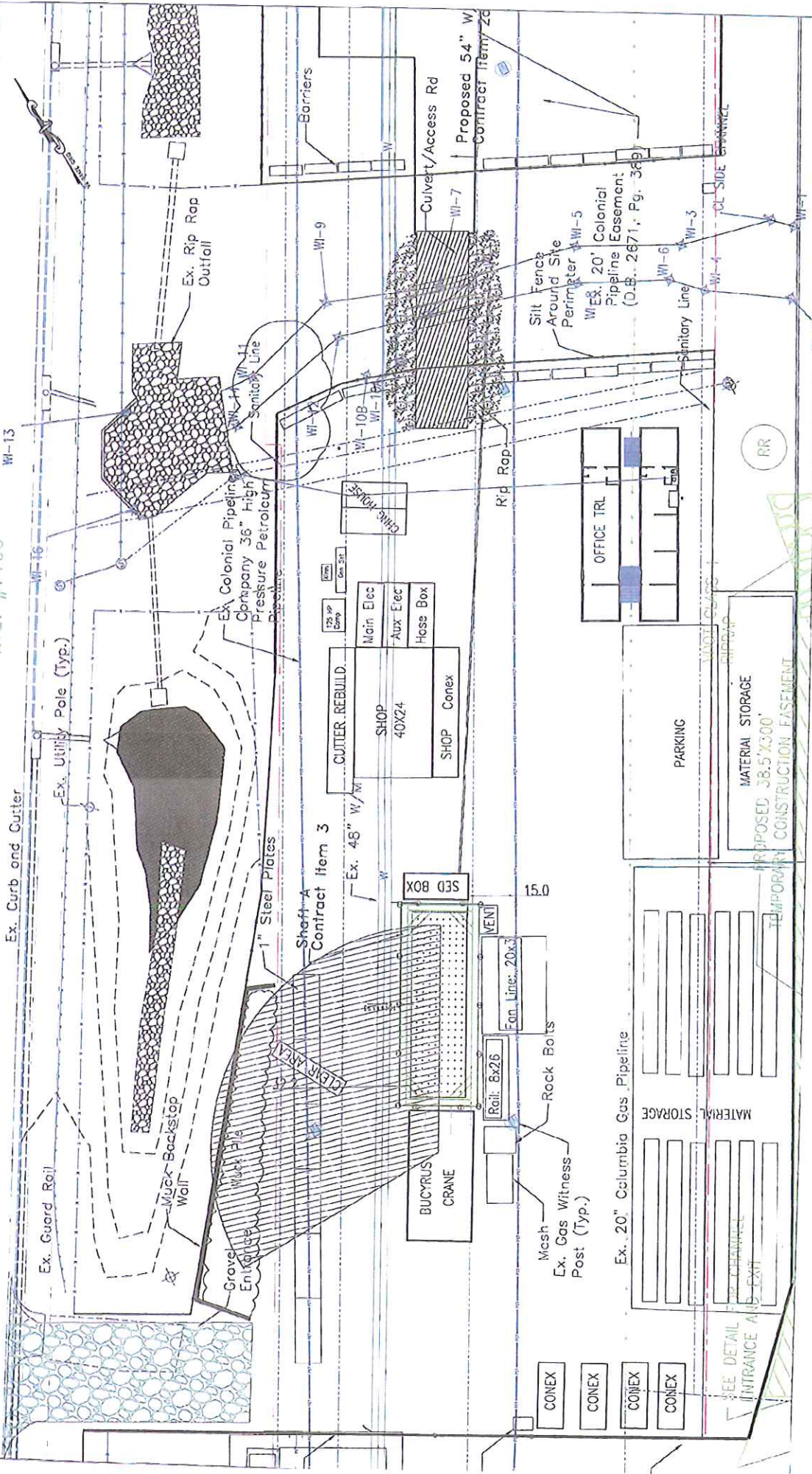
U.S. GEOLOGICAL SURVEY

P9536  
237





# Site Diagram

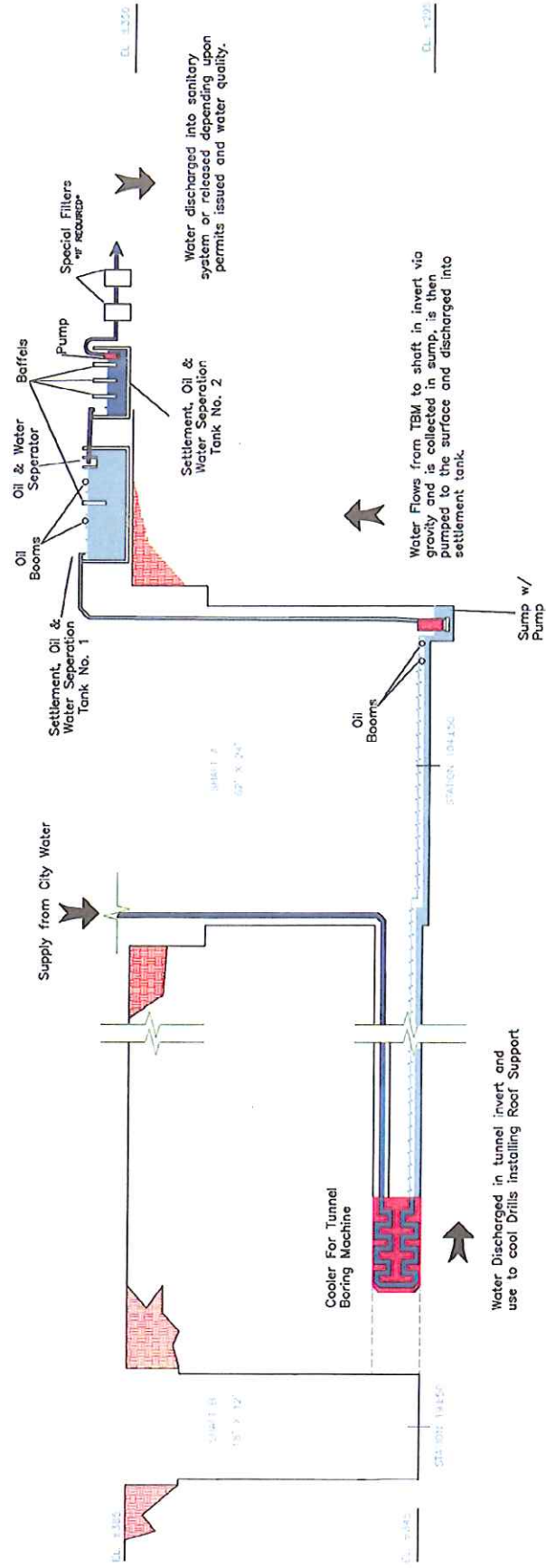


KCR Project Section		KCR Project Section	
CONTRACT TO THE MAX WITH NO		CONTRACT TO THE MAX WITH NO	
FAIRFAX COUNTY ROAD PROJECT		FAIRFAX COUNTY ROAD PROJECT	
DATE	DATE	DATE	DATE
03/01/2011	03/01/2011	03/01/2011	03/01/2011
KCR JV	KCR JV	KCR JV	KCR JV
Page 39 of 72	Page 39 of 72	Page 39 of 72	Page 39 of 72



# Treatment System Diagram

# Proposed Onsite Water/Oil Remediation Plan



# **Site Material Safety Data Sheets (MSDS)**

**SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION.**

**D-A Lubricant**  
 1340 W. 29th St.  
 Indianapolis, IN 46208  
 317/923-5321  
 CHEMICAL EMERGENCY HOTLINE 800 899-9004

PRODUCT NAME: **ROCK DRILL, ALL GRADES**

PRODUCT DESCRIPTION: ROCK DRILL, ALL GRADES

CHEMICAL FAMILY: PETROLEUM OIL, MACHINE OIL

EFFECTIVE DATE: 02/19/08

SUPERCEDES DATE: 03/02/05

Dear Customer:

In compliance with the Superfund Amendments and Reauthorization Act (SARA Title III, Section 313), Federal Hazard Communications Regulations (WHMIS and OSHA 29 CFR 1910.1200) and in the interest of informed use of our product, we are providing you with this Material Safety Data Sheet (MSDS).

This MSDS will be updated regularly to reflect the most recent information in our possession. Please ensure that obsolete MSDS sheets in your files for this part number are discarded.

We THANK YOU for your continued patronage and look forward to providing you with additional quality products and services.

**SECTION 2 - HAZARDOUS INGREDIENTS**

COMPONENT	CAS #	% WT	PEL	TLV	STEL	UNITS	LC50, PPM	LD50, MG/KG
PETROLEUM OILS								
	64742-65-0	60-99	5	5	10	MG/M3		RATI 13000 RABA 2000
	64741-88-4	60-99	5	5	10	MG/M3		RATI 13000 RABA 2000
	64742-01-4	60-99	5	5	10	MG/M3		RATI 13000 RABA 2000
		60-99						
PETROLEUM OILS								
	64741-89-5	60-99	5	5		MG/M3		RATI 13000 RABA 2000

**SECTION 3 - PHYSICAL DATA**

Boiling Pt Deg F/C: >500/>260	Specific Gravity: 0.86 to 0.90
Vapor Pressure (MM HG): NIL	% Volatile Volume: NIL
Vapor Density (Air=1): N/A	Evaporation Rate: <0.1
Solubility in Water: NEGLIGIBLE	Water/Oil Dist Coeff: 0
Appearance and Odor: Amber Liquid with Mild Petroleum Odor	
Physical State: Liquid	PH: N/A
Freeze Pt Deg F/C: N/A	Threshold Odor, PPM: N/A
Other: N/A	VOC: Lbs/Gal = N/A
Grams/Liter = N/A	Grams Vol/Gram Solid = N/A
% VOC: N/A	

**SECTION 4 - FIRE AND EXPLOSION HAZARD DATA**

Classification: Combustible at high temp NFPA Rating: 1.1.0  
 Combustion products: CO, CO<sub>2</sub>, Smoke, Sulfur, Nitrogen and Phosphorous compounds.  
 Flash Point Deg F/C: >370/>188 LEL %: N/A % UEL %: N/A %  
 Extinguishing Media: Water Fog, Foam, Dry Chemical, CO<sub>2</sub>, Sand, or Earth.  
 UN/NA/PIN#: N/A

**Special Fire Fighting Procedures**

Firefighters should wear self-contained breathing equipment. Treat as a Class B fire. Use water to cool threatened containers. 03/01/2011 KCR JV Page 43 of 72

Auto Ign. Temp Deg F/C: >500/>260



PRODUCT NAME: **ROCK DRILL, ALL GRADES**  
EFFECTIVE DATE: 02/19/08 SUPERCEDES DATE: 03/02/05

Unusual fire and explosion hazards: N/A  
Explosion Power: N/A Impact Sensitive: No  
Burning Rate: Low Static Sensitive: No

#### SECTION 5 - HEALTH HAZARD DATA

Product guide: TLV see Section 2 STEL: see Section 2

Routes of Entry: Skin contact, Eye, Inhalation, Ingestion

Effects of Overexposure:

Acute; may cause respiratory system, skin, and/or eye irritation.

Ingestion may cause nausea, cramps, diarrhea, and other gastrointestinal disorders.

Chronic; excess mist may cause respiratory problems.

Excess skin contact may cause dryness and/or sensitization.

Any suspected carcinogen = or > 0.1%?: NO

Warning: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

##### Emergency and First Aid Procedures

Eye: Immediately flush with water for 15 minutes and call a physician.

Inhalation: If affected, remove to fresh air, administer oxygen and call a physician.

Skin: Wash thoroughly with plenty of water and soap.

Ingestion: Seek a physician immediately; show MSDS or Label; DO NOT induce vomiting.

Wash soiled clothing before wearing again.

#### SECTION 6 - REACTIVITY DATA

Stable: YES

Conditions to Avoid: N/A

Incompatibility (Materials to avoid): YES, strong oxidizing agents

Hazardous Decomposition Products: YES, combustion products, see Section 4

Hazardous Polymerization: NO

Conditions to Avoid: N/A

#### SECTION 7 - SPILL OR LEAK PROCEDURES

Listed in SARA Title III, #302: NO #304, Cercla: NO #313: NO

Steps to be taken in case material is released or spilled:

Eliminate source if safe to do so. Prevent from entering waterways and drains. Wear suitable personal protective equipment. Dike and absorb with inert material and transfer to a sealed approved container for disposal. Any spill of this material that can enter navigable waters must be reported immediately to the National Response Center (800-424-8802)

Report Quantity, Lb: N/A

Kg: N/A

TPQ, Lb: N/A

Regulations:

Other: N/A

Hazard Waste: NO

NO.:

Disposal Method: In accordance with Federal, State, and Local Regulations.

\*\*\* SARA Waste Characteristic: N/A

\*\*\* EPA Hazardous Waste Number: N/A

#### SECTION 8 - SAFE HANDLING AND PROTECTION INFORMATION

Respiratory Protection: Use only in well ventilated areas.

Ventilation - Local: Recommended

Special: Avoid Heat/Flame

Mechanical: Required

Other: N/A

Protective Gloves: Oil/Solvent resistant Eye Protection: Safety Glasses/Goggles

Other Protective Equipment:

Oil/Solvent resistant clothing and footwear. If ventilation is inadequate, wear approved respiratory equipment.

Estimated LD50, Mg/Kg: YES Dermal, Rabbit 2000, Oral Rat 13000

Estimated LC50, PPM: NO

---

PRODUCT NAME:	<b>ROCK DRILL, ALL GRADES</b>	
EFFECTIVE DATE:	02/19/08	SUPERCEDES DATE: 03/02/05

---

Sensitization: NO

Irritant: NO

Synergistic Agents: NO

---

**SECTION 9 - SPECIAL PRECAUTIONS**

Precautions to be taken in handling and storing:

Use only in well ventilated areas. Avoid prolonged or repeated breathing of fumes, vapor, or mist. Avoid contact with eyes and skin. DO NOT take internally. Wash thoroughly after using. In case of accident or illness, consult a physician immediately; show label and/or MSDS.

Keep out of reach of children.

Always read and follow directions on product label.

Other precautions:

More technical information (MSDS) available upon request. For professional industrial use only. Good personal hygiene is important. Empty containers retain residue which can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other ignition sources; they may explode and cause injury or death.

The information and recommendations provided herein are believed to be accurate as of the date hereof. However, such information and recommendations are provided without warranty of any kind and D-A Lubricant disclaims any and all liability or legal responsibility for use or reliance upon same.

---



## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION.

**D-A Lubricant**  
 1340 W. 29th St.  
 Indianapolis, IN 46208  
 317/923-5321  
 CHEMICAL EMERGENCY HOTLINE 800 899-9004

PRODUCT NAME: **MAGNAPLEX 1,1 1/2,2**

PRODUCT DESCRIPTION: MAGNAPLEX 1,1 1/2,2

CHEMICAL FAMILY: LUBRICATING GREASE

EFFECTIVE DATE: 01/27/09

SUPERCEDES DATE: 01/22/09

Dear Customer:

In compliance with the Superfund Amendments and Reauthorization Act (SARA Title III, Section 313), Federal Hazard Communications Regulations (WHMIS and OSHA 29 CFR 1910.1200) and in the interest of informed use of our product, we are providing you with this Material Safety Data Sheet (MSDS).

This MSDS will be updated regularly to reflect the most recent information in our possession. Please ensure that obsolete MSDS sheets in your files for this part number are discarded.

We THANK YOU for your continued patronage and look forward to providing you with additional quality products and services.

## SECTION 2 - HAZARDOUS INGREDIENTS

COMPONENT	CAS #	% WT	PEL	TLV	STEL	UNITS	LC50, PPM	LD50, MG/KG	
PETROLEUM OILS									
	64742-65-0	60-65	5	5	10	MG/M3		RATI 13000	RABA 2000
	64741-95-3	20-25	5	5	10	MG/M3		RATI 5000	RABA 2000
MOLYBDENUM DISULFIDE									
	01317-33-5	1-5	15	10		MG/M3		RATI 6500	
ZINC DIORGANO-DITHIOPHOSPHATE									
	68649-42-3	0.5-1.5						RATI >5000	RABA >2000 SARA Rep.
PETROLEUM OILS									
	64742-52-5	60-65	5	5	10	MG/M3		RATI 5000	RABA 2000
LITHIUM HYDROXIDE									
	1310-66-3	1-5							
ANTIMONY DIALKYL-DITHIOCARBAMATE									
	15890-25-2	0-0.5	0.5	0.5		MG/M3	100	RATI 16400	RABA 16000 SARA Rep.
CALCIUM CARBONATE (SALT)									
	471-34-1	5-7	5	10		MG/M3		RATI 6450	

## SECTION 3 - PHYSICAL DATA

Boiling Pt Deg F/C: >500/>260	Specific Gravity: 0.86 TO .92
Vapor Pressure (MM HG): NIL	% Volatile Volume: NIL
Vapor Density (Air=1): N/A	Evaporation Rate: <0.1
Solubility in Water: NEGLIGIBLE	Water/Oil Dist Coeff: 0
Appearance and Odor: Gray grease with petroleum odor	
Physical State: SEMI SOLID	PH: N/A
Freeze Pt Deg F/C: N/A	Threshold Odor, PPM: N/A
Other: N/A	VOC: Lbs/Gal = N/A
Grams/Liter = N/A	Grams VOC/Gram Solid = N/A
% VOC: N/A	

PRODUCT NAME: **MAGNAPLEX 1,1 1/2,2**

EFFECTIVE DATE: 01/27/09

SUPERCEDES DATE: 01/22/09

**SECTION 4 - FIRE AND EXPLOSION HAZARD DATA**

Classification: Combustible at high temp

NFPA Rating: 1.1.0

HMIS RATING: 1.1.0

Combustion products: CO, CO2, Smoke, Sulfur, Nitrogen, Phosphorous, Zinc, Antimony, and Molybdenum Compounds.

Flash Point Deg F/C: &gt;450/232

LEL %: N/A % UEL %: N/A %

Extinguishing Media: Water Fog, Foam, Dry Chemical, CO2, Sand, or Earth.

UN/NA/PIN#: N/A

**Special Fire Fighting Procedures**

Firefighters should wear self-contained breathing equipment. Treat as a Class B fire. Use water to cool threatened containers.

Auto Ign. Temp Deg F/C: &gt;500/&gt;260

Unusual fire and explosion hazards: N/A

Explosion Power: N/A

Impact Sensitive: No

Burning Rate: Low

Static Sensitive: No

**SECTION 5 - HEALTH HAZARD DATA**

Product Guide: TLV see Section 2

STEL: see Section 2

Routes of Entry: Skin contact, Eye, Inhalation, Ingestion

Effects of Overexposure:

Acute; may cause respiratory system, skin, and/or eye irritation.

Ingestion may cause nausea, cramps, diarrhea, and other gastrointestinal disorders.

Chronic; excess mist may cause respiratory problems.

Excess skin contact may cause dryness and/or sensitization.

Excess inhalation and/or ingestion may be harmful to respiration system and heart.

Any suspected carcinogen = or &gt; 0.1%?: NO

**Emergency and First Aid Procedures**

Eye: Immediately flush with plenty of water for 15 minutes and call a physician.

Inhalation: If affected, remove to fresh air, administer oxygen and call a physician.

Skin: Wash thoroughly with plenty of water and soap.

Ingestion: Seek a physician immediately, show MSDS or Label; Do Not Induce vomiting.

Wash soiled clothing before wearing again.

**SECTION 6 - REACTIVITY DATA**

Stable: YES

Conditions to Avoid: N/A

Incompatibility (Materials to avoid): YES, strong oxidizing agents

Hazardous Decomposition Products: YES, combustion products, see Section 4

Hazardous Polymerization: NO

Conditions to Avoid: N/A

**SECTION 7 - SPILL OR LEAK PROCEDURES**

Listed in SARA Title III, #302: NO #304, Cercla: NO #313: YES

Steps to be taken in case material is released or spilled:

Eliminate source if safe to do so. Prevent from entering waterways and drains. Wear suitable personal protective equipment. Dike and absorb with inert material and transfer to a sealed approved container for disposal.

Report Quantity, Lb: N/A

Kg: N/A

TPQ, Lb: N/A

Regulations: SARA

Other: N/A

Hazard Waste: NO

NO.:

Disposal Method: In accordance with Federal, State, and Local Regulations.

\*\*\* SARA Waste Characteristic: N/A

\*\*\* EPA Hazardous Waste Number: N/A



PRODUCT NAME: **MAGNAPLEX 1,1 1/2,2**

EFFECTIVE DATE: 01/27/09

SUPERCEDES DATE: 01/22/09

**SECTION 8 - SAFE HANDLING AND PROTECTION INFORMATION**

Respiratory Protection: Use only in well ventilated areas.

Ventilation - Local: Recommended

Special: Avoid Heat/Flame

Mechanical: Required

Other: N/A

Protective Gloves: Oil/Solvent resistant Eye Protection: Safety Glasses/Goggles

Other Protective Equipment:

Oil/Solvent resistant clothing and footwear. If ventilation is inadequate, wear approved respiratory equipment.

Estimated LD50, Mg/Kg: YES Dermal, Rabbit >2000 Oral Rat >5000

Estimated LC50, PPM: NO

Sensitization: NO

Irritant: NO

Synergistic Agents: NO

**SECTION 9 - SPECIAL PRECAUTIONS**

Precautions to be taken in handling and storing:

Use only in well ventilated areas. Avoid prolonged or repeated breathing of fumes, vapor, or mist. Avoid contact with eyes and skin. DO NOT take internally. Wash thoroughly after using. In case of accident or illness, consult a physician immediately; show label and/or MSDS.

Keep out of reach of children.

Always read and follow directions on product label.

Other precautions:

More technical information (MSDS) available upon request. For professional industrial use only. Good personal hygiene is important. Empty containers retain residue which can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other ignition sources; they may explode and cause injury or death.

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## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION.

**D-A Lubricant**

1340 W. 29th St.

Indianapolis, IN 46208

317/923-5321

CHEMICAL EMERGENCY HOTLINE 800 899-9004

PRODUCT NAME: **WEARGUARD II**

PRODUCT DESCRIPTION: WEAR GUARD

CHEMICAL FAMILY: PETROLEUM OIL, HYDRAULIC FLUID

EFFECTIVE DATE: 03/03/08

SUPERCEDES DATE: 02/19/08

Dear Customer:

In compliance with the Superfund Amendments and Reauthorization Act (SARA Title III, Section 313), Federal Hazard Communications Regulations (WHMIS and OSHA 29 CFR 1910.1200) and in the interest of informed use of our product, we are providing you with this Material Safety Data Sheet (MSDS).

This MSDS will be updated regularly to reflect the most recent information in our possession. Please ensure that obsolete MSDS sheets in your files for this part number are discarded.

We THANK YOU for your continued patronage and look forward to providing you with additional quality products and services.

## SECTION 2 - HAZARDOUS INGREDIENTS

COMPONENT	CAS #	% WT	PEL	TLV	STEL	UNITS	LC50, PPM	LD50, MG/KG
PETROLEUM OILS								
	64742-65-0	60-99	5	5	10	MG/M3		RATI 13000 RABA 2000
	64741-88-4	60-99	5	5	10	MG/M3		RATI 13000 RABA 2000
	64742-58-1	60-99	5	5	10	MG/M3		RATI 13000 RABA 2000
	64742-01-4	60-99	5	5	10	MG/M3		RATI 13000 RABA 2000
		60-99						
ZINC DIORGANO-DITHIOPHOSPHATE								
	68649-42-3	.1-1						RATI >5000 RABA >2000 SARA Rep.
PETROLEUM OILS								
	64741-89-5	60-99	5	5		MG/M3		RATI 13000 RABA 2000

## SECTION 3 - PHYSICAL DATA

Boiling Pt Deg F/C: >500/>260	Specific Gravity: 0.86 to 0.90
Vapor Pressure (MM HG): NIL	% Volatile Volume: NIL
Vapor Density (Air=1): N/A	Evaporation Rate: <0.1
Solubility in Water: NEGLIGIBLE	Water/Oil Dist Coeff: 0
Appearance and Odor: Amber Liquid with Mild Petroleum Odor	
Physical State: Liquid	PH: N/A
Freeze Pt Deg F/C: N/A	Threshold Odor, PPM: N/A
Other: N/A	VOC: Lbs/Gal = N/A
Grams/Liter = N/A	Grams Vol/Gram Solid = N/A
% VOC: N/A	

## SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

Classification: Combustible at high temp NFPA Rating: 1.1.0  
 Combustion products: CO, CO2, Smoke, Sulfur, Nitrogen, Calcium, Phosphorous, and Zinc compounds.  
 Flash Point Deg F/C: >370/>188 LEL %: N/A % UEL %: N/A %  
 Extinguishing Media: Water Fog, Foam, Dry Chemical, CO2, sand, or Earth.  
 UN/NA/PIN#: N/A

PRODUCT NAME: **WEARGUARD II**

EFFECTIVE DATE: 03/03/08

SUPERCEDES DATE: 02/19/08

**Special Fire Fighting Procedures**

Firefighters should wear self-contained breathing equipment. Treat as a Class B fire. Use water to cool threatened containers.

Auto Ign. Temp Deg F/C: >500/>260

Unusual fire and explosion hazards: N/A

Explosion Power: N/A

Impact Sensitive: No

Burning Rate: Low

Static Sensitive: No

**SECTION 5 - HEALTH HAZARD DATA**

Product guide: TLV see Section 2

STEL: see Section 2

Routes of Entry: Skin contact, Eye, Inhalation, Ingestion

Effects of Overexposure:

Acute; may cause respiratory system, skin, and/or eye irritation.

Ingestion may cause nausea, cramps, diarrhea, and other gastrointestinal disorders.

Chronic; excess mist may cause respiratory problems.

Excess skin contact may cause dryness and/or sensitization.

Any suspected carcinogen = or > 0.1%?: NO

Warning: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**Emergency and First Aid Procedures**

Eye: Immediately flush with water for 15 minutes and call a physician.

Inhalation: If affected, remove to fresh air, administer oxygen and call a physician.

Skin: Wash thoroughly with plenty of water and soap.

Ingestion: Seek a physician immediately; show MSDS or Label; DO NOT induce vomiting.

Wash soiled clothing before wearing again.

**SECTION 6 - REACTIVITY DATA**

Stable: YES

Conditions to Avoid: N/A

Incompatibility (Materials to avoid): YES, strong oxidizing agents

Hazardous Decomposition Products: YES, combustion products, see Section 4

Hazardous Polymerization: NO

Conditions to Avoid: N/A

**SECTION 7 - SPILL OR LEAK PROCEDURES**

Listed in SARA Title III, #302: NO

#304, Cercla: NO

#313: YES

Steps to be taken in case material is released or spilled:

Eliminate source if safe to do so. Prevent from entering waterways and drains. Wear suitable personal protective equipment. Dike and absorb with inert material and transfer to a sealed approved container for disposal. Any spill of this material that can enter navigable waters must be reported immediately to the National Response Center (800-424-8802)

Report Quantity, Lb: N/A

Kg: N/A

TPQ, Lb: N/A

Regulations: SARA, TSCA

Other: N/A

Hazard Waste: NO

NO.:

Disposal Method: In accordance with Federal, State, and Local Regulations.

\*\*\* SARA Waste Characteristic: N/A

\*\*\* EPA Hazardous Waste Number: N/A

**SECTION 8 - SAFE HANDLING AND PROTECTION INFORMATION**

Respiratory Protection: Use only in well ventilated areas.

Ventilation - Local: Recommended

Special: Avoid Heat/Flame

Mechanical: Required

Other: N/A

Protective Gloves: Oil/Solvent resistant, Eye Protection: Safety Glasses/Goggles

Other Protective Equipment:

PRODUCT NAME: **WEARGUARD II**

EFFECTIVE DATE: 03/03/08

SUPERCEDES DATE: 02/19/08

Oil/Solvent resistant clothing and footwear. If ventilation is inadequate, wear approved respiratory equipment.

Estimated LD50, Mg/Kg: YES Dermal, Rabbit 2000, Oral Rat 13000

Estimated LC50, PPM: NO

Sensitization: NO

Irritant: NO

Synergistic Agents: NO

#### **SECTION 9 - SPECIAL PRECAUTIONS**

Precautions to be taken in handling and storing:

Use only in well ventilated areas. Avoid prolonged or repeated breathing of fumes, vapor, or mist. Avoid contact with eyes and skin. DO NOT take internally. Wash thoroughly after using. In case of accident or illness, consult a physician immediately; show label and/or MSDS.

Keep out of reach of children.

Always read and follow directions on product label.

Other precautions:

More technical information (MSDS) available upon request. For professional industrial use only. Good personal hygiene is important. Empty containers retain residue which can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other ignition sources; they may explode and cause injury or death.

The information and recommendations provided herein are believed to be accurate as of the date hereof. However, such information and recommendations are provided without warranty of any kind and D-A Lubricant disclaims any and all liability or legal responsibility for use or reliance upon same.



**SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION.****D-A Lubricant**

1340 W. 29th St.  
Indianapolis, IN 46208  
317/923-5321

CHEMICAL EMERGENCY HOTLINE 800 899-9004

PRODUCT NAME: **EXCELON EBS**

PRODUCT DESCRIPTION: EXCELON EBS (formerly Titan EBS)

CHEMICAL FAMILY: PETROLEUM OIL, MOTOR OIL

EFFECTIVE DATE: 03/03/08

SUPERCEDES DATE: 02/19/08

Dear Customer:

In compliance with the Superfund Amendments and Reauthorization Act (SARA Title III, Section 313), Federal Hazard Communications Regulations (WHMIS and OSHA 29 CFR 1910.1200) and in the interest of informed use of our product, we are providing you with this Material Safety Data Sheet (MSDS).

This MSDS will be updated regularly to reflect the most recent information in our possession. Please ensure that obsolete MSDS sheets in your files for this part number are discarded.

We THANK YOU for your continued patronage and look forward to providing you with additional quality products and services.

**SECTION 2 - HAZARDOUS INGREDIENTS**

COMPONENT	CAS #	% WT	PEL	TLV	STEL	UNITS	LC50, PPM	LD50, MG/KG
PETROLEUM OILS								
	64742-65-0	60-99	5	5	10	MG/M3		RATI 13000 RABA 2000
	64741-88-4	60-99	5	5	10	MG/M3		RATI 13000 RABA 2000
ZINC DIORGANO-DITHIOPHOSPHATE								
	68649-42-3	>1.5						RATI >5000 RABA >2000 SARA Rep.
PETROLEUM OILS								
	64741-89-5	60-99	5	5		MG/M3		RATI 13000 RABA 2000

**SECTION 3 - PHYSICAL DATA**

Boiling Pt Deg F/C: >500/>260	Specific Gravity: 0.86 to 0.90
Vapor Pressure (MM HG): NIL	% Volatile Volume: NIL
Vapor Density (Air=1): N/A	Evaporation Rate: <0.1
Solubility in Water: NEGLIGIBLE	Water/Oil Dist Coeff: 0
Appearance and Odor: Brown fluid with Mild Petroleum Odor	
Physical State: LIQUID	PH: N/A
Freeze Pt Deg F/C: N/A	Threshold Odor, PPM: N/A
Other: N/A	VOC: Lbs/Gal = N/A
Grams/Liter = N/A	Grams VOC/Grams Solid = N/A
% VOC: N/A	

**SECTION 4 - FIRE AND EXPLOSION HAZARD DATA**

Classification: Combustible at high temp NEPA Rating: 1.1.0  
 Combustion products: CO, CO2, Smoke, Sulfur, Nitrogen, Phosphorous, Boron, Molybdenum, Calcium, and Zinc Compounds.  
 Flash Point Deg F/C: >370/>188 LEL %: N/A % UEL %: N/A %  
 Extinguishing Media: Water Fog, Foam, Dry Chemical, CO2, Sand, or Earth.  
 UN/NA/PIN#: N/A

**Special Fire Fighting Procedures**

Firefighters should wear self-contained breathing equipment. Treat as a Class B fire. Use

PRODUCT NAME: **EXCELON EBS**

EFFECTIVE DATE: 03/03/08

SUPERCEDES DATE: 02/19/08

water to cool threatened containers.

Auto Ign. Temp Deg F/C: &gt;500/&gt;260

Unusual fire and explosion hazards: N/A

Explosion Power: N/A

Impact Sensitive: No

Burning Rate: Low

Static Sensitive: No

**SECTION 5 - HEALTH HAZARD DATA**

Product guide: TLV see Section 2

STEL: see Section 2

Routes of Entry: Skin contact, Eye, Inhalation, Ingestion

Effects of Overexposure:

Acute; may cause respiratory system, skin, and/or eye irritation.

Ingestion may cause nausea, cramps, diarrhea, and other gastrointestinal disorders.

Chronic; excess mist may cause respiratory problems.

Excess skin contact may cause dryness and/or sensitization.

Any suspected carcinogen = or &gt; 0.1%?: NO

Warning: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**Emergency and First Aid Procedures**

Eye: Immediately flush with water for 15 minutes and call a physician.

Inhalation: If affected, remove to fresh air, administer oxygen and call a physician.

Skin: Wash thoroughly with plenty of water and soap.

Ingestion: Seek a physician immediately; show MSDS or Label; DO NOT induce vomiting.

Wash soiled clothing before wearing again.

**SECTION 6 - REACTIVITY DATA**

Stable: YES

Conditions to Avoid: N/A

Incompatibility (Materials to avoid): YES, strong oxidizing agents

Hazardous Decomposition Products: YES, combustion products, see Section 4

Hazardous Polymerization: NO

Conditions to Avoid: N/A

**SECTION 7 - SPILL OR LEAK PROCEDURES**

Listed in SARA Title III, #302: NO

#304, Cercla: NO

#313: YES

Steps to be taken in case material is released or spilled:

Eliminate source if safe to do so. Prevent from entering waterways and drains. Wear suitable personal protective equipment. Dike and absorb with inert material and transfer to a sealed approved container for disposal. Any spill of this material that can enter navigable waters must be reported immediately to the National Response Center (800-424-8802)

Report Quantity, Lb: N/A

Kg: N/A

TPQ, Lb: N/A

Regulations: SARA, TSCA

Other: N/A

Hazard Waste: NO

NO.:

Disposal Method: In accordance with Federal, State, and Local Regulations.

\*\*\* SARA Waste Characteristic: N/A

\*\*\* EPA Hazardous Waste Number: N/A

**SECTION 8 - SAFE HANDLING AND PROTECTION INFORMATION**

Respiratory Protection: Use only in well ventilated areas.

Ventilation - Local: Recommended

Special: Avoid Heat/Flame

Mechanical: Required

Other: N/A

Protective Gloves: Oil/Solvent resistant Eye Protection: Safety Glasses/Goggles

Other Protective Equipment:

Oil/Solvent resistant clothing and footwear. If ventilation is inadequate, wear approved respiratory equipment.

PRODUCT NAME: **EXCELON EBS**

EFFECTIVE DATE: 03/03/08

SUPERCEDES DATE: 02/19/08

Estimated LD50, Mg/Kg: YES Dermal, Rabbit 2000, Oral Rat 13000

Estimated LC50, PPM: NO

Sensitization: NO

Irritant: NO

Synergistic Agents: NO

**SECTION 9 - SPECIAL PRECAUTIONS**

Precautions to be taken in handling and storing:

Use only in well ventilated areas. Avoid prolonged or repeated breathing of fumes, vapor, or mist. Avoid contact with eyes and skin. DO NOT take internally. Wash thoroughly after using. In case of accident or illness, consult a physician immediately; show label and/or MSDS.

Keep out of reach of children.

Always read and follow directions on product label.

Other precautions:

More technical information (MSDS) available upon request. For professional industrial use only. Good personal hygiene is important. Empty containers retain residue which can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other ignition sources; they may explode and cause injury or death.

The information and recommendations provided herein are believed to be accurate as of the date hereof. However, such information and recommendations are provided without warranty of any kind and D-A Lubricant disclaims any and all liability or legal responsibility for use or reliance upon same.

**SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION.****D-A Lubricant**

1340 W. 29th St.  
Indianapolis, IN 46208  
317/923-5321

CHEMICAL EMERGENCY HOTLINE 800 899-9004

PRODUCT NAME: **DURAPLEX**

PRODUCT DESCRIPTION: DURAPLEX, GRADES 1 AND 2

CHEMICAL FAMILY: PETROLEUM OIL, GREASE

EFFECTIVE DATE: 01/22/09

SUPERCEDES DATE: 02/19/08

Dear Customer:

In compliance with the Superfund Amendments and Reauthorization Act (SARA Title III, Section 313), Federal Hazard Communications Regulations (WHMIS and OSHA 29 CFR 1910.1200) and in the interest of informed use of our product, we are providing you with this Material Safety Data Sheet (MSDS).

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We THANK YOU for your continued patronage and look forward to providing you with additional quality products and services.

**SECTION 2 - HAZARDOUS INGREDIENTS**

COMPONENT	CAS #	% WT	PEL	TLV	STEL	UNITS	LC50, PPM	LD50, MG/KG	
PETROLEUM OILS									
	64742-52-5	60-99	5	5	10	MG/M3		RAT1 5000 RAB1 2000	
BARIUM TALLOW FATTY ACID COMPLEX									
	68201-19-4	10-30	0.5	0.5		MG/M3			SARA Rep.
MOLYBDENUM DISULFIDE									
	01317-33-5	1-5	15	10		MG/M3		RAT1 6500	
ZINC NAPHTHENATE									
	12001-85-3	1-5							SARA Rep.

**SECTION 3 - PHYSICAL DATA**

Boiling Pt Deg F/C: >500/>260	Specific Gravity: 0.89 TO 0.98
Vapor Pressure (MM HG): NIL	% Volatile Volume: NIL
Vapor Density (Air=1): N/A	Evaporation Rate: <0.1
Solubility in Water: NEGLIGIBLE	Water/Oil Dist Coeff: 0
Appearance and Odor: Gray grease with petroleum odor	
Physical State: SEMI SOLID	PH: N/A
Freeze Pt Deg F/C: N/A	Threshold Odor, PPM: N/A
Other: N/A	VOC: Lbs/Gal = N/A
Grams/Liter = N/A	Grams VOC/Gram Solid = N/A
% VOC: N/A	

**SECTION 4 - FIRE AND EXPLOSION HAZARD DATA**

Classification: Combustible at high temp NFPA Rating: 0.1.0  
 Combustion products: CO, CO2, Smoke, Sulfur, Nitrogen, Barium, Molybdenum, Phosphorus, and Zinc compounds.  
 Flash Point Deg F/C: >370/>188 LEL %: N/A UEL %: N/A  
 Extinguishing Media: Water Fog, Foam, Dry Chemical, CO2, Sand, or Earth.  
 UN/NA/PIN#: N/A



PRODUCT NAME: **DURAPLEX**

EFFECTIVE DATE: 01/22/09

SUPERCEDES DATE: 02/19/08

Firefighters should wear self-contained breathing equipment. Treat as a Class B fire. Use water to cool threatened containers.

Auto Ign. Temp Deg F/C: &gt;500/&gt;260

Unusual fire and explosion hazards: N/A

Explosion Power: N/A

Impact Sensitive: No

Burning Rate: Low

Static Sensitive: No

**SECTION 5 - HEALTH HAZARD DATA**

Product Guide: TLV see Section 2

STEL: see Section 2

Routes of Entry: Skin contact, Eye, Inhalation, Ingestion

Effects of Overexposure:

Acute; may cause respiratory system, skin, and/or eye irritation.

Ingestion may cause nausea, cramps, diarrhea, and other gastrointestinal disorders.

Chronic; excess mist may cause respiratory problems.

Excess skin contact may cause dryness.

Excess skin contact and/or ingestion may cause damage to lungs, kidneys, heart, stomach and/or reproductive system.

Any suspected carcinogen = or &gt;0.1%: NO

Warning: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**Emergency and First Aid Procedures**

Eye: Immediately flush with water for 15 minutes and call a physician.

Inhalation: If affected, remove to fresh air, administer oxygen and call a physician.

Skin: Wash thoroughly with plenty of water and soap.

Ingestion: Seek a physician immediately, show MSDS or Label; DO NOT induce vomiting.

Wash soiled clothing before wearing again.

**SECTION 6 - REACTIVITY DATA**

Stable: YES

Conditions to Avoid: N/A

Incompatibility (Materials to avoid): YES, strong oxidizing agents

Hazardous Decomposition Products: YES, pyrolysis products, CO, SOX

Hazardous Polymerization: NO

Conditions to Avoid: N/A

**SECTION 7 - SPILL OR LEAK PROCEDURES**

Listed in SARA Title III, #302: NO

#304, Cercla: YES

#313: YES

Steps to be taken in case material is released or spilled:

Eliminate source if safe to do so. Prevent from entering waterways and drains. Wear suitable personal protective equipment. Dike and absorb with inert material and transfer to a sealed approved container for disposal.

Report Quantity, Lb: N/A

Kg: N/A

TPQ, Lb: N/A

Regulations: SARA, CERCLA, RCRA, WHMIS

Other:

Hazard Waste: EP Toxic

No.: D005, D008

Disposal Method: In accordance with Federal, State, and Local Regulations.

**SECTION 8 - SAFE HANDLING AND PROTECTION INFORMATION**

Respiratory Protection: Use only in well ventilated areas.

Ventilation - Local: Recommended

Special: Avoid Heat/Flame

Mechanical: Required

Other: N/A

Protective Gloves: Oil/Solvent resistant Eye Protection: Safety Glasses/Goggles

Other Protective Equipment:

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Oil/Solvent resistant clothing and footwear. If ventilation is inadequate,

PRODUCT NAME: **DURAPLEX**

EFFECTIVE DATE: 01/22/09

SUPERCEDES DATE: 02/19/08

wear approved respiratory equipment.  
Estimated LD50, Mg/Kg: YES Dermal, Rabbit 2000, Oral Rat 5100  
Estimated LC50, PPM: NO  
Sensitization: NO  
Irritant: NO Synergistic Agents: NO

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**SECTION 9 - SPECIAL PRECAUTIONS**

Precautions to be taken in handling and storing:

Use only in well ventilated areas. Avoid prolonged or repeated breathing of fumes, vapor, or mist. Avoid contact with eyes and skin. DO NOT take internally. Wash thoroughly after using. Keep away from food, drink and animal feeds. Keep only in original labeled containers. In case of accident or illness, consult a physician immediately; show label and/or MSDS. Keep out of reach of children. Always read and follow directions on label.

Other precautions:

More technical information (MSDS) available upon request. For professional industrial use only. Good personal hygiene is most important. Empty containers retain residue which can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, spark or other ignition sources; they may explode and cause injury or death.

The information and recommendations provided herein are believed to be accurate as of the date hereof. However, such information and recommendations are provided without warranty of any kind and D-A Lubricant disclaims any and all liability or legal responsibility for use or reliance upon same.

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**SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION.****D-A Lubricant**

1340 W. 29th St.  
Indianapolis, IN 46208  
317/923-5321

CHEMICAL EMERGENCY HOTLINE 800 899-9004

PRODUCT NAME: **DTL GEAR OIL, ALL GRADES**

PRODUCT DESCRIPTION: DTL GEAR OIL, ALL GRADES

CHEMICAL FAMILY: PETROLEUM OIL, GEAR OIL

EFFECTIVE DATE: 02/19/08

SUPERCEDES DATE: 03/02/05

Dear Customer:

In compliance with the Superfund Amendments and Reauthorization Act (SARA Title III, Section 313), Federal Hazard Communications Regulations (WHMIS and OSHA 29 CFR 1910.1200) and in the interest of informed use of our product, we are providing you with this Material Safety Data Sheet (MSDS).

This MSDS will be updated regularly to reflect the most recent information in our possession. Please ensure that obsolete MSDS sheets in your files for this part number are discarded.

We THANK YOU for your continued patronage and look forward to providing you with additional quality products and services.

**SECTION 2 - HAZARDOUS INGREDIENTS**

COMPONENT	CAS #	% WT	PEL	TLV	STEL	UNITS	LC50, PPM	LD50, MG/KG
PETROLEUM OILS								
	64742-65-0	60-99	5	5	10	MG/M3		RATI 13000 RABA 2000
	64741-88-4	60-99	5	5	10	MG/M3		RATI 13000 RABA 2000
	64742-01-4	60-99	5	5	10	MG/M3		RATI 13000 RABA 2000
		60-99						
MOLYBDENUM DISULFIDE								
	01317-33-5	0.1-5	15	10		MG/M3		RATI 6500

**SECTION 3 - PHYSICAL DATA**

Boiling Pt Deg F/C: >500/>260  
Vapor Pressure (MM HG): NIL  
Vapor Density (Air=1): N/A  
Solubility in Water: NEGLIGIBLE  
Appearance and Odor: Dark Amber Fluid with Mild Petroleum Odor  
Physical State: LIQUID  
Freeze Pt Deg F/C: N/A  
Other: N/A  
Grams/Liter = N/A  
% VOC: N/A

Specific Gravity: 0.86 to 0.90  
% Volatile Volume: NIL  
Evaporation Rate: <0.1  
Water/Oil Dist Coeff: 0  
PH: N/A  
Threshold Odor, PPM: N/A  
VOC: Lbs/Gal = N/A  
Grams VOC/Grams Solid = N/A

**SECTION 4 - FIRE AND EXPLOSION HAZARD DATA**

Classification: Combustible at high temp NFPA Rating: 1.1.0  
Combustion products: CO, CO2, Smoke, Sulfur, Nitrogen, Phosphorous, Boron and Molybdenum Compounds.  
Flash Point Deg F/C: >370/>188 LEL %: N/A % UEL %: N/A %  
Extinguishing Media: Water Fog, Foam, Dry Chemical, CO2, Sand, or Earth.  
UN/NA/PIN#: N/A

**Special Fire Fighting Procedures**

Firefighters should wear self-contained breathing equipment. Treat as a Class B fire. Use water to cool threatened containers.

PRODUCT NAME: **DTL GEAR OIL, ALL GRADES**  
EFFECTIVE DATE: 02/19/08 SUPERCEDES DATE: 03/02/05

Auto Ign. Temp Deg F/C: >500/>260

Unusual fire and explosion hazards: N/A

Explosion Power: N/A

Impact Sensitive: No

Burning Rate: Low

Static Sensitive: No

#### SECTION 5 - HEALTH HAZARD DATA

Product guide: TLV see Section 2 STEL: see Section 2

Routes of Entry: Skin contact, Eye, Inhalation, Ingestion

Effects of Overexposure:

Acute; may cause respiratory system, skin, and/or eye irritation.

Ingestion may cause nausea, cramps, diarrhea, and other gastrointestinal disorders.

Chronic; excess mist may cause respiratory problems.

Excess skin contact may cause dryness and/or sensitization.

Any suspected carcinogen = or > 0.1%?: NO

Warning: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Emergency and First Aid Procedures

Eye: Immediately flush with water for 15 minutes and call a physician.

Inhalation: If affected, remove to fresh air, administer oxygen and call a physician.

Skin: Wash thoroughly with plenty of water and soap.

Ingestion: Seek a physician immediately; show MSDS or Label; DO NOT induce vomiting.

Wash soiled clothing before wearing again.

#### SECTION 6 - REACTIVITY DATA

Stable: YES

Conditions to Avoid: N/A

Incompatibility (Materials to avoid): YES, strong oxidizing agents

Hazardous Decomposition Products: YES, combustion products, see Section 4

Hazardous Polymerization: NO

Conditions to Avoid: N/A

#### SECTION 7 - SPILL OR LEAK PROCEDURES

Listed in SARA Title III, #302: NO #304, Cercla: NO #313: NO

Steps to be taken in case material is released or spilled:

Eliminate source if safe to do so. Prevent from entering waterways and drains. Wear suitable personal protective equipment. Dike and absorb with inert material and transfer to a sealed approved container for disposal. Any spill of this material that can enter navigable waters must be reported immediately to the National Response Center (800-424-8802)

Report Quantity, Lb: N/A

Kg: N/A

TPQ, Lb: N/A

Regulations:

Other: N/A

Hazard Waste: NO

NO.:

Disposal Method: In accordance with Federal, State, and Local Regulations.

\*\*\* SARA Waste Characteristic: N/A

\*\*\* EPA Hazardous Waste Number: N/A

#### SECTION 8 - SAFE HANDLING AND PROTECTION INFORMATION

Respiratory Protection: Use only in well ventilated areas.

Ventilation - Local: Recommended

Special: Avoid Heat/Flame

Mechanical: Required

Other: N/A

Protective Gloves: Oil/Solvent resistant Eye Protection: Safety Glasses/Goggles

Other Protective Equipment:

Oil/Solvent resistant clothing and footwear. If ventilation is inadequate, wear approved respiratory equipment.

Estimated LD50, Mg/Kg: YES Dermal, Rabbit 2000, Oral Rat 13000



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PRODUCT NAME:	<b>DTL GEAR OIL, ALL GRADES</b>	
EFFECTIVE DATE:	02/19/08	SUPERCEDES DATE: 03/02/05

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Estimated LC50, PPM: NO

Sensitization: NO

Irritant: NO

Synergistic Agents: NO

---

#### **SECTION 9 - SPECIAL PRECAUTIONS**

Precautions to be taken in handling and storing:

Use only in well ventilated areas. Avoid prolonged or repeated breathing of fumes, vapor, or mist. Avoid contact with eyes and skin. DO NOT take internally. Wash thoroughly after using. In case of accident or illness, consult a physician immediately; show label and/or MSDS.

Keep out of reach of children.

Always read and follow directions on product label.

Other precautions:

More technical information (MSDS) available upon request. For professional industrial use only. Good personal hygiene is important. Empty containers retain residue which can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other ignition sources; they may explode and cause injury or death.

The information and recommendations provided herein are believed to be accurate as of the date hereof. However, such information and recommendations are provided without warranty of any kind and D-A Lubricant disclaims any and all liability or legal responsibility for use or reliance upon same.

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# CITGO No. 2 Diesel Fuel, Low Sulfur, All Grades

## Material Safety Data Sheet

CITGO Petroleum Corporation  
P. O. Box 4689  
Houston, TX 77210

MSDS No. AG2DF  
Revision Date 12/31/2007

**IMPORTANT:** This MSDS is prepared in accordance with 29 CFR 1910.1200. Read this MSDS before transporting, handling, storing or disposing of this product and forward this information to employees, customers and users of this product.

### Hazard Rankings

	HMIS	NFPA
Health Hazard	* 2	0
Fire Hazard	2	2
Reactivity	0	0

\* = Chronic Health Hazard

### Emergency Overview

**Physical State** Liquid.

**Color** Transparent, clear to yellow or red. **Odor** Characteristic, kerosene-like.

#### WARNING!

Combustible liquid; vapor may cause flash fire.  
Harmful or fatal if swallowed - can enter lungs and cause damage.

Can cause eye, skin or respiratory tract irritation.  
May be harmful if inhaled or absorbed through the skin.  
Overexposure can cause central nervous system (CNS) depression and/or other target organ effects.

Possible Cancer Hazard (See Section 3)

Harmful to aquatic organisms.

### Protective Equipment

Minimum Recommended  
See Section 8 for Details



## SECTION 1. PRODUCT IDENTIFICATION

<b>Trade Name</b>	CITGO No. 2 Diesel Fuel, Low Sulfur, All Grades	<b>Technical Contact</b>	(832) 486-5940
<b>Product Number</b>	Various	<b>Medical Emergency</b>	(832) 486-4700
<b>CAS Number</b>	68476-34-6	<b>CHEMTREC Emergency (United States Only)</b>	(800) 424-9300
<b>Product Family</b>	Motor fuels.		
<b>Synonyms</b>	No. 2-D Grade Diesel Fuel Oil (defined by ASTM D-975); Treated or Refined Diesel Fuel No. 2; Diesel No. 2; Diesel Motor Fuel No. 2; Diesel Oil (Medium); Grade 2 Distillate Fuel; Hydrodesulfurized (HDS) Light Catalytically Cracked Distillate; Middle Distillates (Petroleum); HDS Diesel; Hydrodesulfurized Medium Distillate; HDS Middle Distillate; C9-C16 Petroleum Hydrocarbons; Ultra Low Sulfur Diesel.		

## SECTION 2. COMPOSITION

This product may be composed, in whole or in part, of any of the following refinery streams:

Diesel Fuel No. 2 [CAS No.: 68476-34-6]  
Hydrodesulfurized Middle Distillate (petroleum) [CAS No.: 64742-80-9]  
Hydrodesulfurized Light Catalytic Cracked Distillate (Petroleum) [CAS No.: 68333-25-5]  
Kerosene [CAS No.: 8008-20-6]  
Hydrodesulfurized Kerosine (Petroleum) [CAS No.: 64742-81-0]

This product contains the following chemical components:

Component Name(s)	CAS Registry No.	Concentration (%)
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## CITGO No. 2 Diesel Fuel, Low Sulfur, All Grades

Nonane, all isomers	Mixture	1 - 10
Trimethylbenzenes, all isomers	25551-13-7	0 - 2
Naphthalene	91-20-3	0 - 2
Cumene	98-82-8	0 - 1
Ethylbenzene	100-41-4	0 - 1

### SECTION 3. HAZARDS IDENTIFICATION

Also see Emergency Overview and Hazard Ratings on the top of Page 1 of this MSDS.

**Major Route(s) of Entry** Skin contact. Inhalation.

#### Signs and Symptoms of Acute Exposure

**Inhalation** Breathing high concentrations may be harmful. Mist or vapor can irritate the throat and lungs. Breathing this material may cause central nervous system depression with symptoms including nausea, headache, dizziness, fatigue, drowsiness, or unconsciousness.

**Eye Contact** This material can cause eye irritation with tearing, redness, or a stinging or burning feeling. Further, it can cause swelling of the eyes with blurred vision. Effects may become more serious with repeated or prolonged contact.

**Skin Contact** This material can cause skin irritation. Symptoms include redness, itching, and burning of the skin. This material can be absorbed by the skin and produce central nervous system depression (headache, nausea, fatigue and/or other symptoms including unconsciousness). If the skin is damaged, absorption increases. Prolonged and/or repeated contact may cause severe dermatitis and/or more serious skin disorders. Chronic symptoms may include drying, swelling, scaling, blistering, cracking, and/or severe tissue damage.

**Ingestion** If swallowed, this material may irritate the mouth, throat, and esophagus. It can be absorbed into the blood stream through the stomach and intestinal tract. Symptoms may include a burning sensation of the mouth and esophagus, nausea and vomiting. In addition, it can cause central nervous system effects characterized by dizziness, staggering, drowsiness, delirium and/or loss of consciousness.

Because of the low viscosity, this material can enter the lungs directly by aspiration during swallowing or subsequent vomiting. Aspiration of a small amount of liquid can cause severe lung damage and/or death.

**Chronic Health Effects Summary** Secondary effects of ingestion and subsequent aspiration into the lungs may cause pneumatocele (lung cavity) formation and chronic lung dysfunction.

This product contains petroleum middle distillates similar to those shown to produce skin tumors on laboratory rodents following repeated application. All tumors appeared during the latter portion of the typical 2-year lifespan of the animals. Certain studies have shown that washing the exposed skin of the test animal with soap and water between treatments greatly reduces the potential tumorigenic effects. These data suggest that good personal hygiene is effective in reducing the risk of this potential adverse health effect.

This material and/or its components have been associated with developmental toxicity, reproductive toxicity, genotoxicity, immunotoxicity, and/or carcinogenicity. Refer to Section 11 of this MSDS for additional health-related information.

**Conditions Aggravated by Exposure** Disorders of the following organs or organ systems that may be aggravated by significant exposure to this material or its components include: Skin, Respiratory System, Liver, Kidneys, Central Nervous System (CNS)

**Target Organs** May cause damage to the following organs: kidneys, lungs, liver, mucous membranes, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea

**Carcinogenic Potential**

## CITGO No. 2 Diesel Fuel, Low Sulfur, All Grades

This material may contain ethylbenzene and naphthalene at concentrations above 0.1%. IARC has identified ethylbenzene and naphthalene as possibly carcinogenic to humans (Group 2B) based on laboratory animal studies. The NTP has determined that naphthalene is *reasonably anticipated to be a human carcinogen* based on sufficient evidence from studies in experimental animals. NTP has determined that exposure to diesel exhaust particulates, a complex mixture of combustion products of diesel fuel, is reasonably anticipated to be a human carcinogen.

<b>OSHA Hazard Classification is indicated by an "X" in the box adjacent to the hazard title. If no "X" is present, the product does not exhibit the hazard as defined in the OSHA Hazard Communication Standard (29 CFR 1910.1200).</b>							
OSHA Health Hazard Classification				OSHA Physical Hazard Classification			
Irritant	<input checked="" type="checkbox"/>	Sensitizer	<input type="checkbox"/>	Combustible	<input checked="" type="checkbox"/>	Explosive	<input type="checkbox"/>
Toxic	<input type="checkbox"/>	Highly Toxic	<input type="checkbox"/>	Flammable	<input type="checkbox"/>	Oxidizer	<input type="checkbox"/>
Corrosive	<input type="checkbox"/>	Carcinogenic	<input type="checkbox"/>	Compressed Gas	<input type="checkbox"/>	Organic Peroxide	<input type="checkbox"/>
						Pyrophoric	<input type="checkbox"/>
						Water-reactive	<input type="checkbox"/>
						Unstable	<input type="checkbox"/>

### SECTION 4. FIRST AID MEASURES

**Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid. For more specific information, refer to Exposure Controls and Personal Protection in Section 8 of this MSDS.**

<b>Inhalation</b>	Move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If breathing is difficult, 100 percent humidified oxygen should be administered by a qualified individual. Seek medical attention immediately. Keep the affected individual warm and at rest.
<b>Eye Contact</b>	Check for and remove contact lenses. Flush eyes with cool, clean, low-pressure water for at least 15 minutes while occasionally lifting and lowering eyelids. Do not use eye ointment unless directed to by a physician. Seek medical attention if excessive tearing, irritation, or pain persists.
<b>Skin Contact</b>	Remove contaminated shoes and clothing. Flush affected area with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. Do not use ointments. If skin surface is not damaged, clean affected area thoroughly with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists.
<b>Ingestion</b>	Do not induce vomiting. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. Never give anything by mouth to a person who is not fully conscious. Do not leave victim unattended. Seek medical attention immediately.
<b>Notes to Physician</b>	<p><b>INHALATION:</b> Inhalation overexposure can produce toxic effects. Monitor for respiratory distress. If cough or difficulty in breathing develops, evaluate for upper respiratory tract inflammation, bronchitis, and pneumonitis. Administer supplemental oxygen with assisted ventilation, as required.</p> <p><b>INGESTION:</b> If ingested, this material presents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended. Consider activated charcoal and/or gastric lavage. If patient is obtunded, protect the airway by cuffed endotracheal intubation or by placement of the body in a Trendelenburg and left lateral decubitus position.</p>



## CITGO No. 2 Diesel Fuel, Low Sulfur, All Grades

### SECTION 5. FIRE FIGHTING MEASURES

<b>NFPA Flammability Classification</b>	NFPA Class-II combustible liquid.		
<b>Flash Point</b>	Closed cup: AP 52°C (AP 125°F). (Pensky-Martens.)		
<b>Lower Flammable Limit</b>	AP 0.6 %	<b>Upper Flammable Limit</b>	AP 7.5 %
<b>Autolgnition Temperature</b>	>254°C (>489°F)		
<b>Hazardous Combustion Products</b>	Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons and oxides of sulfur and nitrogen.		
<b>Special Properties</b>	Combustible Liquid! This material releases vapors when heated above ambient temperatures. Vapors can cause a flash fire. Vapors can travel to a source of ignition and flashback. A vapor and air mixture can create an explosion hazard in confined spaces such as sewers. Use only with adequate ventilation. If container is not properly cooled, it can rupture in the heat of a fire.		
<b>Extinguishing Media</b>	<p><b>SMALL FIRE:</b> Use dry chemicals, carbon dioxide, foam, or inert gas (nitrogen). Carbon dioxide and inert gas can displace oxygen. Use caution when applying carbon dioxide or inert gas in confined spaces.</p> <p><b>LARGE FIRE:</b> Use foam, water fog, or water spray. Water fog and spray are effective in cooling containers and adjacent structures. However, water can cause frothing and/or may not extinguish the fire. Water can be used to cool the external walls of vessels to prevent excessive pressure, autoignition or explosion. DO NOT use a solid stream of water directly on the fire as the water may spread the fire to a larger area.</p>		
<b>Protection of Fire Fighters</b>	Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles. Cover pooling liquid with foam. Containers can build pressure if exposed to radiant heat; cool adjacent containers with flooding quantities of water until well after the fire is out. Withdraw immediately from the area if there is a rising sound from a venting safety device or discoloration of vessels, tanks, or pipelines. Be aware that burning liquid will float on water. Notify appropriate authorities of potential fire and explosion hazard if liquid enter sewers or waterways.		

### SECTION 6. ACCIDENTAL RELEASE MEASURES

Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For more specific information, refer to the Emergency Overview on Page 1, Exposure Controls and Personal Protection in Section 8 and Disposal Considerations in Section 13 of this MSDS.

Combustible Liquid! Release can result in a fire hazard. Evacuate all non-essential personnel from release area. Establish a regulated zone with site control and security. Eliminate all ignition sources. Stop the leak if it can be done without risk. A vapor-suppressing foam may be used to reduce vapors. Properly bond or ground all equipment used when handling this material. Avoid skin contact. Do not walk through spilled material. Verify that responders are properly trained and wearing appropriate personnel protective equipment. Dike far ahead of a liquid spill. Do not allow released material to enter waterways, sewers, basements, or other confined areas. This material will float on water. Absorb or cover with dry earth, sand or other non-combustible material. Use clean, non-sparking tools to collect absorbed material. Place spent sorbent materials, free liquids and other clean-up debris into proper waste containers for appropriate disposal. Certain releases must be reported to the National Response Center (800/424-8802) and state or regulatory authorities. Comply with all laws and regulations.

## SECTION 7. HANDLING AND STORAGE

### Handling

#### Combustible Liquid

A static electrical charge can accumulate when this material is flowing through pipes, nozzles or filters and when it is agitated. A static spark discharge can ignite accumulated vapors particularly during dry weather conditions. Always bond receiving containers to the fill pipe before and during loading. Always keep nozzle in contact with the container throughout the loading process. Do not fill any portable container in or on a vehicle. Special precautions, such as reduced loading rates and increased monitoring, must be observed during "switch loading" operations (i.e., loading this material in tanks or shipping compartments that previously containing gasoline or similar low flash point products).

Fire hazard increases as product temperature approaches its flash point. Keep container closed and drum bungs in place. Remove spillage immediately from walking areas. Do not handle or store near heat, sparks or other potential ignition sources. Do not handle or store with oxidizing agents. Avoid breathing mist or vapor. Never siphon by mouth. Do not taste or swallow. Avoid contact with eyes, skin and clothing. Use gloves constructed of impervious materials and protective clothing if direct contact is anticipated. Provide ventilation to maintain exposure potential below applicable exposure levels. Avoid water contamination. Wash thoroughly after handling. Prevent contact with food or tobacco products.

When performing repairs and maintenance on contaminated equipment, keep unnecessary persons from hazard area. Eliminate heat, flame and other potential ignition sources. Drain and purge equipment, as necessary, to remove material residues. Remove contaminated clothing. Wash exposed skin thoroughly with soap and water after handling.

Do not use this material as fuel for equipment, such as portable heaters, in enclosed areas. Hazardous combustion products can cause death.

Protect the environment from releases of this material. Prevent discharges to surface waters and groundwater. Maintain handling, transfer and storage equipment in proper working order.

Misuse of empty containers can be dangerous. Empty containers may contain material residues which can ignite with explosive force. **Cutting or welding of empty containers can cause fire, explosion, or release of toxic fumes from residues** Do not pressurize or expose empty containers to open flame, sparks, or heat. Keep container closed and drum bungs in place. All label warnings and precautions must be observed. Return empty drums to a qualified reconditioner. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling, or disposing of empty containers and/or waste residues of this material.

### Storage

Store in a cool, dry, well-ventilated place. Keep containers tightly closed. Do not store this product near heat, flame or other potential ignition sources. Do not store with oxidizers. Do not store this product in unlabeled containers. Do not puncture or incinerate containers. Ground all equipment containing this material. All electrical equipment in areas where this material is stored or handled must meet all applicable requirements of the NFPA's National Electrical Code (NEC). Store and transport in accordance with all applicable laws.

## SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Engineering Controls

Provide ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below. All electrical equipment should comply with the National Electric Code. An emergency eye wash station and safety shower should be located near the work-station.

### Personal Protective Equipment

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. The following pictograms represent the minimum requirements for personal protective equipment. For certain operations, additional PPE may be required.

## CITGO No. 2 Diesel Fuel, Low Sulfur, All Grades



<b>Eye Protection</b>	Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Chemical goggles should be worn during transfer operations or when there is a likelihood of misting, splashing, or spraying of this material. A suitable emergency eye wash water and safety shower should be located near the work station.
<b>Hand Protection</b>	Avoid skin contact. Use heavy duty gloves constructed of chemical resistant materials such as Viton® or heavy nitrile rubber. Wash hands with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities or leaving work. DO NOT use gasoline, kerosene, solvents or harsh abrasives as skin cleaners.
<b>Body Protection</b>	Avoid skin contact. Wear long-sleeved fire-retardant garments (e.g., Nomex®) while working with flammable and combustible liquids. Additional chemical-resistant protective gear may be required if splashing or spraying conditions exist. This may include an apron, boots and additional facial protection. If product comes in contact with clothing, immediately remove soaked clothing and shower. Promptly remove and discard contaminated leather goods.
<b>Respiratory Protection</b>	Airborne concentration will determine the level of respiratory protection required. Respiratory protection is normally not required unless the product is heated or misted. For known or anticipated vapor or mist concentrations above the occupational exposure guidelines (see below), use a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter if adequate protection is provided. Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).
<b>General Comments</b>	Warning! Use of this material in spaces without adequate ventilation may result in generation of hazardous levels of combustion products and/or inadequate oxygen levels for breathing. Odor is an inadequate warning for hazardous conditions.

### Occupational Exposure Guidelines

<b>Substance</b>	<b>Applicable Workplace Exposure Levels</b>
Nonane, all isomers	<b>ACGIH (United States).</b> TWA: 200 ppm 8 hour(s).
Ethylmethylbenzene, all isomers	Not available.
Trimethylbenzenes, all isomers	<b>ACGIH (United States).</b> TWA: 25 ppm 8 hour(s).
Naphthalene	<b>ACGIH (United States). Skin</b> TWA: 10 ppm 8 hour(s). STEL: 15 ppm 15 minute(s). <b>OSHA (United States).</b> TWA: 10 ppm 8 hour(s).
Cumene	<b>ACGIH (United States).</b> TWA: 50 ppm 8 hour(s). <b>OSHA (United States). Skin</b> TWA: 50 ppm 8 hour(s).
n-Propylbenzene	Not available.
1, 2, 4 Trimethylbenzene	Not available.
Ethylbenzene	<b>ACGIH (United States).</b> TWA: 100 ppm 8 hour(s). STEL: 125 ppm 15 minute(s). <b>OSHA (United States).</b> TWA: 100 ppm 8 hour(s).
Xylene, all isomers	<b>ACGIH (United States).</b> TWA: 100 ppm 8 hour(s). STEL: 150 ppm 15 minute(s). <b>OSHA (United States).</b> TWA: 100 ppm 8 hour(s).
Diesel exhaust particulate	Not available.

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Benzene	<b>ACGIH (United States). Skin</b> TWA: 0.5 ppm 8 hour(s). STEL: 2.5 ppm 15 minute(s). <b>OSHA (United States). Skin Notes:</b> See Table Z-2 for exclusions in 20 CFR 1910.1028 to the PEL. TWA: 1 ppm 8 hour(s). STEL: 5 ppm 15 minute(s).
Toluene	<b>ACGIH (United States). Skin</b> TWA: 20ppm 8 hour(s). <b>OSHA (United States).</b> TWA: 200 ppm 8 hour(s). CEIL: 300 ppm PEAK: 500 ppm
Middle distillates, petroleum Straight-run middle distillate (petroleum)	Not available. <b>ACGIH (United States, 1998). Skin</b> TWA: 100 mg/m <sup>3</sup>
Distillates, petroleum, light catalytic cracked Kerosene	Not available. <b>NIOSH REL (United States).</b> TWA: 100 mg/m <sup>3</sup> 8 hour(s).
Hydrosulfurized middle distillate (petroleum) Hydrosulfurized Kerosine (Petroleum)	Not available. Not available.
Distillates, petroleum, hydrosulfurized light catalytic cracked Diesel Fuel No. 2	Not available. <b>ACGIH TLV (United States). Skin</b> TWA: 100 mg/m <sup>3</sup> 8 hour(s).

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES (TYPICAL)

<b>Physical State</b>	Liquid.	<b>Color</b>	Transparent, clear to yellow or red.	<b>Odor</b>	Characteristic, kerosene-like.
<b>Specific Gravity</b>	AP 0.84 (Water = 1)	<b>pH</b>	Not Applicable.	<b>Vapor Density</b>	AP 5 (Air = 1)
<b>Boiling Range</b>	154° C (309° F) to 371° C (700° F)			<b>Melting/Freezing Point</b>	Not available.
<b>Vapor Pressure</b>	<0.3 kPa (<2 mm Hg) (at 20°C)			<b>Volatility</b>	840 g/l VOC (w/v)
<b>Solubility in Water</b>	Very slightly soluble in cold water. (<0.1 % w/w)			<b>Viscosity (cSt @ 40°C)</b>	AP 3
<b>Flash Point</b>	Closed cup: AP 52°C (AP 125°F). (Pensky-Martens.)				
<b>Additional Properties</b>	Density = AP 7.0 lbs/gal. Viscosity (ASTM D2161) = 30 - 40 SUS @ 100° F				

## SECTION 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable.	<b>Hazardous Polymerization</b>	Not expected to occur.
<b>Conditions to Avoid</b>	Keep away from all ignition sources and strong oxidizing conditions.		
<b>Materials Incompatibility</b>	Strong acids, alkalis, and oxidizers such as liquid chlorine, other halogens, hydrogen peroxide and oxygen.		
<b>Hazardous Decomposition Products</b>	No additional hazardous decomposition products were identified other than the combustion products identified in Section 5 of this MSDS.		



## SECTION 11. TOXICOLOGICAL INFORMATION

For other health-related information, refer to the Emergency Overview on Page 1 and the Hazards Identification in Section 3 of this MSDS.

### Toxicity Data

#### Diesel Fuel, No. 2

ORAL LD50, Acute: 12,000 to 17,500 mg/kg or 9.0 ml/kg [Rat]

DERMAL LD50, Acute: >5.0 ml/kg [Rabbit screen level].

DRAIZE EYE, Acute: Mild irritant [Rabbit]

DRAIZE DERMAL, Acute: Severe skin irritant [Rabbit].

BUEHLER DERMAL, Acute: Non-sensitizing [Guinea Pig]

14-Day DERMAL, Sub-chronic: 0% and 67% mortality at 4.0 and 8.0 ml/kg [Rabbit]

62-Week DERMAL, Chronic: 0.05 ml/kg 3x/week [Mouse] - Extreme skin irritation.

97-Week DERMAL, Chronic: 243 g/kg applied 3x/week [Mouse] - Extreme skin irritation.

Moderate increase in contact-point skin tumors.

#### MUTAGENICITY:

Modified Ames Assay: Negative. [Salmonella typhimurium]

In-vitro SCE Ovary Assay: Negative. [Chinese Hamster]

In-vitro Lymphoma Assay: Negative. [Mouse]

In-vivo Dominant Lethal Assay: Negative. [Mouse]

In-vivo Bone Marrow Assay: Clastogenic at 2.0 ml/kg and 6.0 ml/kg [Rat]

#### Diesel exhaust particulate

Lung tumor and lymphomas were identified in rats and mice exposed to unfiltered diesel fuel exhaust in chronic inhalation studies. Further, epidemiological studies have identified increase incidences of lung cancer in US railroad workers and bladder cancer in bus and truck drivers possibly associated with exposure to diesel engine exhaust. NTP has determined that exposure to diesel exhaust particulates, a complex mixture of combustion products of diesel fuel, is reasonably anticipated to be a human carcinogen. In addition, NIOSH has identified complete diesel exhaust as a potential carcinogen.

#### Trimethylbenzenes, all isomers

##### Studies of Workers:

Levels of total hydrocarbon vapors present in the breathing atmosphere of these workers ranged from 10 to 60 ppm. The TCLo for humans is 10 ppm, with somnolence and respiratory tract irritation noted.

##### Studies in Laboratory Animals:

In inhalation studies with rats, four of ten animals died after exposures of 2400 ppm for 24 hours. An oral dose of 5 mL/kg resulted in death in one of ten rats. Minimum lethal intraperitoneal doses were 1.5 to 2.0 mL/kg in rats and 1.13 to 12 mL/kg in guinea pigs. Mesitylene (1, 3, 5 Trimethylbenzene) inhalation at concentrations of 1.5, 3.0, and 6.0 mg/L for six hours was associated with dose-related changes in white blood cell counts in rats. No significant effects on the complete blood count were noted with six hours per day exposure for five weeks, but elevations of alkaline phosphatase and SGOT were observed. Central nervous system depression and ataxia were noted in rats exposed to 5,100 to 9,180 ppm for two hours.

#### Naphthalene

##### Studies in Humans Overexposed to Naphthalene:

Severe jaundice, neurotoxicity (kernicterus) and fatalities have been reported in young children and infants as a result of hemolytic anemia from over-exposure to naphthalene. Persons with Glucose 6-phosphate dehydrogenase (G6PD) deficiency are more prone to the hemolytic effects of naphthalene. Adverse effects on the kidney have also been reported from over-exposure to naphthalene but these effects are believed to be a consequence of hemolytic anemia, and not a direct effect.

##### Studies in Laboratory Animals:

Hemolytic anemia has been observed in laboratory animals exposed to naphthalene. Laboratory rodents exposed to naphthalene vapor for 2 years (lifetime studies) developed non-neoplastic and neoplastic tumors and inflammatory lesions of the nasal and respiratory

## CITGO No. 2 Diesel Fuel, Low Sulfur, All Grades

tract. Cataracts and other adverse effects on the eye have been observed in laboratory animals exposed to high levels of naphthalene. Findings from a large number of bacterial and mammalian cell mutation assays have been negative. A few studies have shown chromosomal effects (elevated levels of Sister Chromatid Exchange or chromosomal aberrations) *in vitro*.

### Ethylbenzene

Effects from Acute Exposure:

ORAL (LD50), Acute: 3,500 mg/kg [Rat].

DERMAL (LD50), Acute: 17,800 uL/kg [Rabbit].

INTRAPERITONEAL (LD50), Acute: 2,624 mg/kg [Rat].

Effects from Prolonged or Repeated Exposure:

Findings from a 2-year inhalation study in rodents conducted by NTP were as follows: Effects were observed only at the highest exposure level (750 ppm). At this level the incidence of renal tumors was elevated in male rats (tubular carcinomas) and female rats (tubular adenomas). Also, the incidence of tumors was elevated in male mice (alveolar and bronchiolar carcinomas) and female mice (hepatocellular carcinomas). IARC has classified ethyl benzene as "possibly carcinogenic to humans" (Group 2B). Studies in laboratory animals indicate some evidence of post-implantation deaths following high levels of maternal exposure. The relevance of these findings to humans is not clear at this time. Studies in laboratory animals indicate limited evidence of renal malformations, resorptions, and developmental delays following high levels of maternal exposure. The relevance of these findings to humans is not clear at this time. Studies in laboratory animals indicate some evidence of adverse effects on the liver, kidney, thyroid, and pituitary gland.

### Middle distillates, petroleum

Long-term repeated (lifetime) skin exposure to similar materials has been reported to result in an increase in skin tumors in laboratory rodents. The relevance of these findings to humans is not clear at this time.

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Freshwater Toxicity:

Concentration: 2400 ppm Exposure: 48 hrs. Species: Juven. Am. Shad ( *Squalius cephalus*) Assay: TLM

Concentration: >127 ppm Exposure: 96 hrs. Species: Bluegill ( *Lepomis macrochirus*) Assay: LC50

#### Saltwater Toxicity

Concentration: 10 ppm Exposure: 96 hrs. Species: Menhaden ( *Brevoortia patronus*) Assay: LC50

Concentration: 10 ppm Exposure: 96 hrs. Species: Grass Shrimp Assay: LC50

### Environmental Fate

If spilled, this material will normally evaporate. Hydrocarbon components may contribute to atmospheric smog. If released to the subsoils, petroleum middle distillate fuels will strongly adsorb to soils. Groundwater should be considered as an exposure pathway. Liquid and vapor can migrate through the subsurface and preferential pathways (such as utility line backfill) to downgradient receptors.

Middle distillates are potentially toxic to freshwater and saltwater ecosystems. Distillate fuels will normally float on water. In stagnant or slow-flowing waterways, a hydrocarbon layer can cover a large surface area. As a result, this oil layer can limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway can cause a fish kill or create an anaerobic environment. Also, this coating action can also kill plankton, algae, and water birds.

## SECTION 13. DISPOSAL CONSIDERATIONS

Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.

Maximize material recovery for reuse or recycling. Recovered non-usable material may be regulated by US EPA as a hazardous waste due to its ignitibility (D001) and/or its toxic (D018) characteristics. In addition, conditions of use may cause this material to become a hazardous waste, as defined by Federal or State regulations. It is the responsibility of the user to determine if the material is a hazardous waste at the time of disposal. Transportation, treatment, storage, and disposal of waste material must be conducted in accordance with RCRA regulations (see 40 CFR Parts 260 through 271). Contact your regional US EPA office for guidance concerning case specific disposal issues. State and/or local regulations might be even more restrictive.

## SECTION 14. TRANSPORT INFORMATION

The shipping description below may not represent requirements for all modes of transportation, shipping methods or locations outside of the United States.

**US DOT Status** A U.S. Department of Transportation (DOT) regulated material. The following U. S. DOT hazardous materials shipping description applies to bulk packaged material that is transported by highway or rail. Alternate shipping descriptions may be required for product transported by marine vessel, air or other method and for non-bulk packaged material.

**Proper Shipping Name** Diesel Fuel, Combustible liquid, NA1993, PG III

**Hazard Class** DOT Class: Combustible liquid with a flash point greater than 37.8°C (100°F). **Packing Group** III

**UN/NA Number** NA 1993

**Reportable Quantity** A Reportable Quantity (RQ) has not been established for this material.

**Placard(s)**



**Emergency Response Guide No.** 128

**MARPOL III Status** Not a DOT "Marine Pollutant" per 49 CFR 171.8.

## SECTION 15. REGULATORY INFORMATION

**TSCA Inventory** This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.

**SARA 302/304 Emergency Planning and Notification** The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.

**SARA 311/312 Hazard Identification** The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories:  
fire, Acute (Immediate) Health Hazard, Chronic (Delayed) Health Hazard

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### SARA 313 Toxic Chemical Notification and Release Reporting

This product contains the following components in concentrations above *de minimis* levels that are listed as toxic chemicals in 40 CFR Part 372 pursuant to the requirements of Section 313 of SARA:

Naphthalene [CAS No.: 91-20-3] Concentration: 2%  
Ethylbenzene [CAS No.: 100-41-4] Concentration: 0.9%

### CERCLA

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances present in this product or refinery stream that may be subject to this statute are:

Naphthalene [CAS No.: 91-20-3] RQ = 100 lbs. (45.36 kg) Concentration: 2%  
Cumene [CAS No.: 98-82-8] RQ = 5000 lbs. (2268 kg) Concentration: 0.9%  
Ethylbenzene [CAS No.: 100-41-4] RQ = 1000 lbs. (453.6 kg) Concentration: 0.9%  
Xylene, all isomers [CAS No.: 1330-20-7] RQ = 100 lbs. (45.36 kg) Concentration: 0.9%  
Benzene [CAS No.: 71-43-2] RQ = 10 lbs. (4.536 kg) Concentration: 0.045%

### Clean Water Act (CWA)

This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

### California Proposition 65

This material may contain the following components which are known to the State of California to cause cancer, birth defects or other reproductive harm, and may be subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):

Diesel exhaust particulate  
Naphthalene: <2%  
Ethylbenzene: <1%  
Toluene: <0.1%  
Benzene: <0.1%

### New Jersey Right-to-Know Label

Diesel Fuel

### Additional Remarks

As minimum requirements, CITGO recommends that the following advisory information be displayed on equipment used to dispense diesel fuel. Additional warnings specified by various regulatory authorities may be required: **"Diesel Fuel DANGER: Combustible Liquid. Use as a Motor Fuel Only. DO NOT FILL CONTAINERS THAT HAVE PREVIOUSLY CONTAINED GASOLINE OR OTHER FLAMMABLE LIQUIDS. Sparks From static electricity can ignite flammable vapor residues. PLACE CONTAINER ON GROUND. DO NOT FILL ANY PORTABLE CONTAINER IN OR ON A VEHICLE. Containers must be metal or other material approved for storing diesel fuel. Keep nozzle spout in contact with the container during the entire filling operation. NO SMOKING! Do not leave nozzle unattended during filling. HARMFUL OR FATAL IF SWALLOWED** If swallowed, do not induce vomiting. Call Physician Immediately. Keep Out of Reach of Children. Avoid prolonged breathing of vapors. Never siphon by mouth. Do not store in vehicle or living space. Store and use in a well ventilated area. Do not use near heat, spark or flame. Keep container closed."

## SECTION 16. OTHER INFORMATION

Refer to the top of Page 1 for the HMIS and NFPA Hazard Ratings for this product.

### REVISION INFORMATION

Version Number 5.1  
Revision Date 12/31/2007

### ABBREVIATIONS

AP: Approximately EQ: Equal >: Greater Than <: Less Than NA: Not Applicable ND: No Data NE: Not Established

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ACGIH: American Conference of Governmental Industrial Hygienists

IARC: International Agency for Research on Cancer

NIOSH: National Institute of Occupational Safety and Health

NPCA: National Paint and Coating Manufacturers Association

NFPA: National Fire Protection Association

AIHA: American Industrial Hygiene Association

NTP: National Toxicology Program

OSHA: Occupational Safety and Health Administration

HMIS: Hazardous Materials Information System

EPA: US Environmental Protection Agency

### **DISCLAIMER OF LIABILITY**

THE INFORMATION IN THIS MSDS WAS OBTAINED FROM SOURCES WHICH WE BELIEVE ARE RELIABLE. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESSED OR IMPLIED REGARDING ITS CORRECTNESS. SOME INFORMATION PRESENTED AND CONCLUSIONS DRAWN HEREIN ARE FROM SOURCES OTHER THAN DIRECT TEST DATA ON THE SUBSTANCE ITSELF. THIS MSDS WAS PREPARED AND IS TO BE USED ONLY FOR THIS PRODUCT. IF THE PRODUCT IS USED AS A COMPONENT IN ANOTHER PRODUCT, THIS MSDS INFORMATION MAY NOT BE APPLICABLE. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION OR PRODUCTS FOR THEIR PARTICULAR PURPOSE.

THE CONDITIONS OR METHODS OF HANDLING, STORAGE, USE, AND DISPOSAL OF THE PRODUCT ARE BEYOND OUR CONTROL AND MAY BE BEYOND OUR KNOWLEDGE. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.

\*\*\*\*\* END OF MSDS \*\*\*\*\*

## Woodard, Dawn (DEQ)

---

**From:** James Kassouf [jkassouf@creqcc.com]  
**Sent:** Tuesday, March 01, 2011 7:58 PM  
**To:** Woodard, Dawn (DEQ)  
**Cc:** Miller, Mark (DEQ)  
**Subject:** RE: Petroleum Contaminated Water at KCR/Joint Venture Site  
**Attachments:** KCR VPDES Permit Application.zip

Ms. Woodard,  
Mark Miller asked that I forward you the attached permit, I apologize for the delay.  
Please see attached.  
Thank you for your time,

James R. Kassouf  
KCR Joint Venture  
11654 Plaza America Drive, # 177  
Reston, VA 20190-4700  
(216) 409-7509 Mobile  
(216) 395-0101Fax  
[JKassouf@CREQCC.com](mailto:JKassouf@CREQCC.com)

*Owner: Fairfax County Water Authority  
Title: Corballis to Fox Mill 54" Water Main  
Project: 1859/4  
Contract No: 4500000646*

---

**From:** Miller, Mark (DEQ) [mailto:Mark.Miller@deq.virginia.gov]  
**Sent:** Wednesday, February 23, 2011 3:31 PM  
**To:** James Kassouf  
**Cc:** Glassman, Joseph (DEQ); Woodard, Dawn (DEQ)  
**Subject:** RE: Petroleum Contaminated Water at KCR/Joint Venture Site

James,

Item 7 is no. A Site Characterization Report has not been completed for the property.

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Please let me know if you have any other questions.

*Mark L. Miller - Pollution Response Program  
Virginia Department of Environmental Quality - NRO  
13901 Crown Court, Woodbridge, VA 22193  
Ph. 703-583-3864; Fax 703-583-3821  
E-mail: [Mark.Miller@deq.virginia.gov](mailto:Mark.Miller@deq.virginia.gov)  
[www.deq.virginia.gov/prep/](http://www.deq.virginia.gov/prep/)*

---

**From:** James Kassouf [mailto:jkassouf@creqcc.com]  
**Sent:** Wednesday, February 23, 2011 2:32 PM  
**To:** Miller, Mark (DEQ)  
**Subject:** RE: Petroleum Contaminated Water at KCR/Joint Venture Site

Mr. Miller,

I hope this finds you well.

We are awaiting the results of water analysis test from both Atlas & A third party. I have the following questions;

- a. Item 7. I do not know how to answer this.
- b. Item 15. The stream that our runoff is entering is not shown on this map. How do I proceed?
- c. Item 16 We believe this was researched by our previous superintendent however there is no record of any permit applications. Given that we may have a runoff issue is it possible to obtain both permits?
- d. More to follow.....

Please call with any responses or questions.

Thank you for your time,

James R. Kassouf  
KCR Joint Venture  
11654 Plaza America Drive, # 177  
Reston, VA 20190-4700  
(216) 409-7509 Mobile  
(216) 395-0101 Fax  
[JKassouf@CREQCC.com](mailto:JKassouf@CREQCC.com)

*Owner: Fairfax County Water Authority  
Title: Corbalis to Fox Mill 54" Water Main  
Project: 1859/4  
Contract No: 4500000646*

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**From:** Miller, Mark (DEQ) [mailto:Mark.Miller@deq.virginia.gov]  
**Sent:** Monday, February 14, 2011 2:55 PM  
**To:** James Kassouf; Jim Foley; Jared Leute  
**Cc:** Glassman, Joseph (DEQ); Woodard, Dawn (DEQ); fmendler@fairfaxwater.org  
**Subject:** Petroelum Contaminated Water at KCR/Joint Venture Site

Mr. Kassouf, attached is the General Permit Registration Statement for Discharges from Petroleum Contaminated Sites. Please complete the attached statement and return it to the DEQ Regional Office at:

Virginia Department of Environmental Quality – Northern Regional Office  
13901 Crown Court, Woodbridge, VA 22193 Fax 703-583-3821  
Attn: Dawn Woodard  
E-mail: [dawn.woodard@deq.virginia.gov](mailto:dawn.woodard@deq.virginia.gov)  
703 583-3899

Please call myself, Dawn Woodard, or Joe Glassman (703-583-3808), with any questions regarding the permit application.

*Mark L. Miller - Pollution Response Program*  
*Virginia Department of Environmental Quality - NRO*  
*13901 Crown Court, Woodbridge, VA 22193*  
*Ph. 703-583-3864; Fax 703-583-3821*  
*E-mail: [Mark.Miller@deq.virginia.gov](mailto:Mark.Miller@deq.virginia.gov)*  
*[www.deq.virginia.gov/prep/](http://www.deq.virginia.gov/prep/)*



## Woodard, Dawn (DEQ)

---

**From:** Woodard, Dawn (DEQ)  
**Sent:** Friday, March 04, 2011 2:06 PM  
**To:** 'James Kassouf'  
**Subject:** RE: KCR Joint Venture Permit application 1 of 2

Thank you for the revision. Everything seems to be in order so, as soon as I receive the original I will issue the permit. Once it's issued, I will e-mail a copy to you then snail-mail the original (via certified mail).

In the meantime, feel free to contact me if you have any questions.

Have a great weekend!

**Dawn M. Woodard**

*Environmental Specialist I / Database Manager  
Department of Environmental Quality  
Northern Regional Office - Remediation Division  
(703) 583-3899 office  
(703) 583-3821 fax  
**NEW EMAIL:** [dawn.woodard@deq.virginia.gov](mailto:dawn.woodard@deq.virginia.gov)*

---

**From:** James Kassouf [<mailto:jkassouf@creqcc.com>]  
**Sent:** Friday, March 04, 2011 11:38 AM  
**To:** Woodard, Dawn (DEQ)  
**Subject:** KCR Joint Venture Permit application 1 of 2

Dawn,

Please see the revised application attached. We will overnight an original to you.

Please let me know if there are any other issues encountered. We appreciate all of your assistance on this matter.

Attached Part 1, 3 and 4

Thank you for your time,

**James R. Kassouf**

Kassouf & Clinton Road Joint Venture  
11654 Plaza America Dr., # 177  
Reston, VA 20190  
(216) 409-7509 Mobile  
(216) 395-0101 Fax  
[JKassouf@CREQCC.com](mailto:JKassouf@CREQCC.com)



**-PROJECT-**

*Owner: Fairfax County Water Authority  
Title: Corbalis to Fox Mill 54" Water Main  
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## Woodard, Dawn (DEQ)

---

**From:** Glassman, Joseph (DEQ)  
**Sent:** Thursday, March 03, 2011 2:44 PM  
**To:** Woodard, Dawn (DEQ)  
**Subject:** FW: Registration statement needing your approval  
**Attachments:** CorbalisToFoxMill\_EvalCkfst.doc

Recommend No. 3 – unleaded gas and other.

Joe Glassman  
Environmental Specialist  
Petroleum Remediation Section  
Virginia Department of Environmental Quality  
Northern Regional Office  
13901 Crown Court  
Woodbridge, VA 22193  
703-583-3808  
703-583-3821 (fax)

---

**From:** Woodard, Dawn (DEQ)  
**Sent:** Thursday, March 03, 2011 1:33 PM  
**To:** Glassman, Joseph (DEQ)  
**Subject:** Registration statement needing your approval

Joe,

This is for the site Mark Miller has been talking to us about. You can access the Registration Statement and supporting documentation at: [U:\REMEDIAT\General\\_Permit\2008 General Permit\Application temp docs\KCR-JointVentureSite](U:\REMEDIAT\General_Permit\2008 General Permit\Application temp docs\KCR-JointVentureSite).

As you can see from my e-mail below, I have requested some additional information. I don't think that additional information will affect your ability to review this registration statement.

What contaminants should they monitor for:

1. Unleaded gas only;
2. Unleaded gas and leaded gas;
3. Unleaded gas and other petroleum products (ex: diesel, used oil, etc.);
4. All of the above: Unleaded gas, leaded gas and other petroleum products?

If you need to see what parameters are included on the different DMRs, you can view them at: [U:\REMEDIAT\General\\_Permit\2008 General Permit\Form Letters, Templates](U:\REMEDIAT\General_Permit\2008 General Permit\Form Letters, Templates)

Holler if you need anything or have problems with any of the e-docs.

Thanks,

# Dawn M. Woodard

*Environmental Specialist I / Database Manager  
Department of Environmental Quality  
Northern Regional Office - Remediation Division  
(703) 583-3899 office  
(703) 583-3821 fax  
**NEW EMAIL:** dawn.woodard@deq.virginia.gov*

---

**From:** Woodard, Dawn (DEQ)  
**Sent:** Thursday, March 03, 2011 1:18 PM  
**To:** 'James Kassouf'  
**Cc:** Miller, Mark (DEQ); Glassman, Joseph (DEQ)  
**Subject:** RE: Petroleum Contaminated Water at KCR/Joint Venture Site

James,

I have received and reviewed the VPDES General Permit Registration Statement for Discharges from Petroleum Contaminated Sites (PDGP) for the Corbalis to Fox Mill 54" Water Main – Work Site A. Some additional information is needed before we can proceed with issuing a permit:

1. Item #2: From what I can tell, the site is in Reston, 20190. Is this correct?
2. Item #11: What is the anticipated duration of the discharge in days, months &/or years?
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5. An e-mailed copy of the registration statement is acceptable to get the process started but I cannot issue the permit until I have received the original with a "wet" signature.

Feel free to contact me if you have any questions.

Thank you,

# Dawn M. Woodard

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**NEW EMAIL:** dawn.woodard@deq.virginia.gov*

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**Sent:** Tuesday, March 01, 2011 7:58 PM  
**To:** Woodard, Dawn (DEQ)  
**Cc:** Miller, Mark (DEQ)  
**Subject:** RE: Petroleum Contaminated Water at KCR/Joint Venture Site



Ms. Woodard,  
Mark Miller asked that I forward you the attached permit, I apologize for the delay.  
Please see attached.  
Thank you for your time,

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*Owner: Fairfax County Water Authority  
Title: Corbalis to Fox Mill 54" Water Main  
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*Ph. 703-583-3864; Fax 703-583-3821*  
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13901 Crown Court, Woodbridge, VA 22193  
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Attn: Dawn Woodard  
E-mail: dawn.woodard@deq.virginia.gov  
703 583-3899

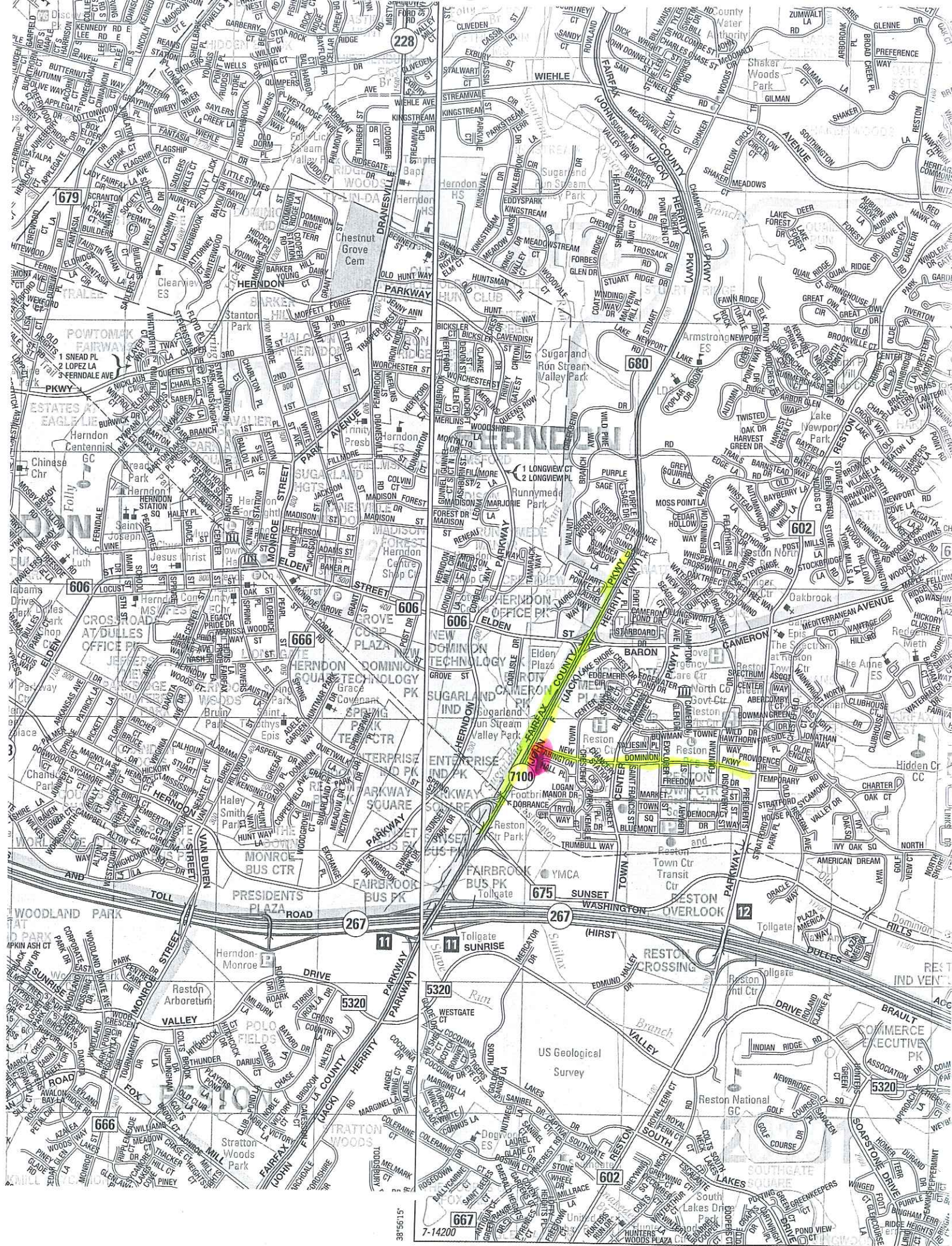
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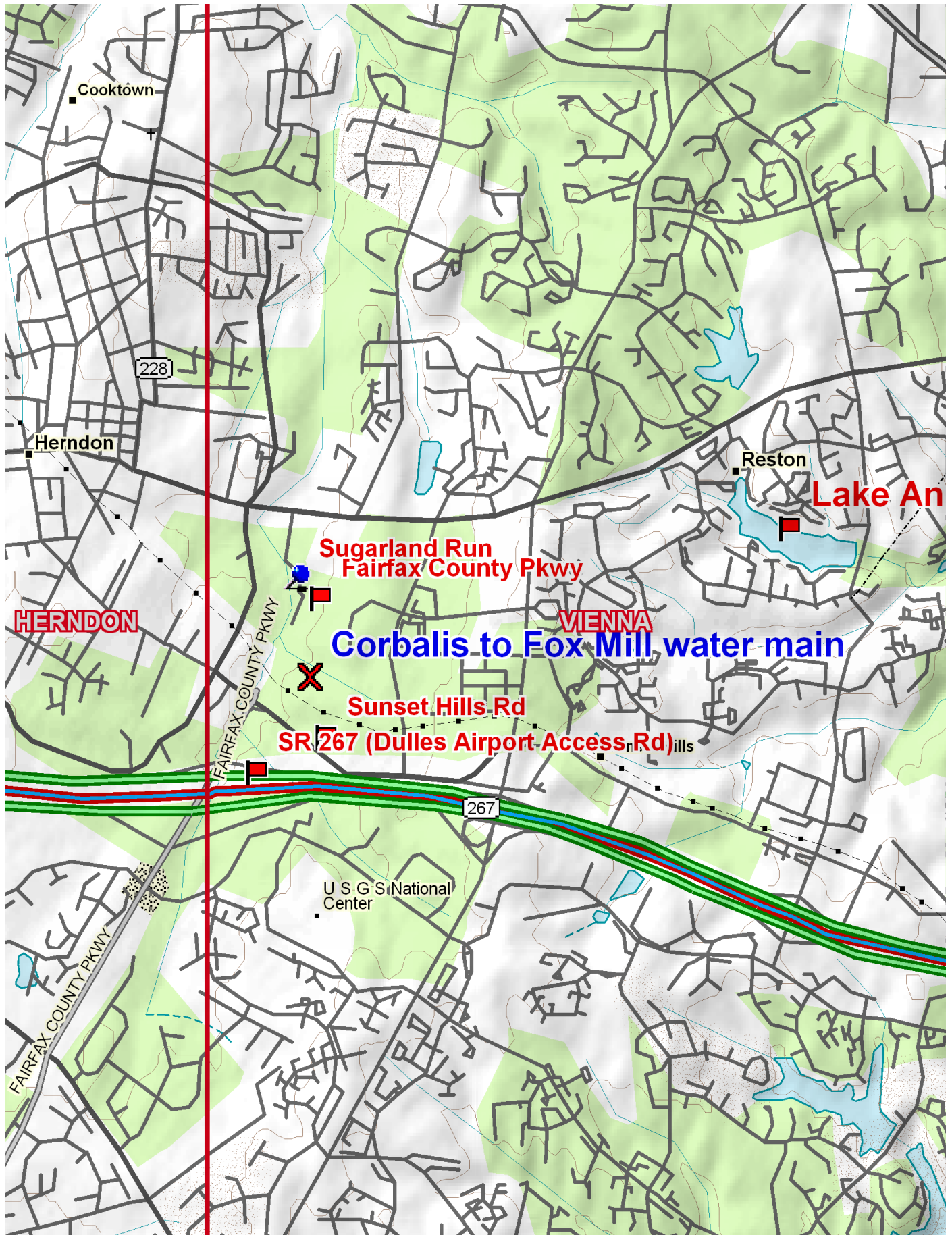






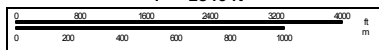






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www.delorme.com

Scale 1 : 28,125  
1" = 2340 ft



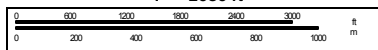
TN  
MN  
10.4°W





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www.delorme.com

Scale 1 : 25,000  
1" = 2080 ft



TN  
MN  
10.4°W



# PREP incident report

[Print](#)

## Incident Report Information

(Information presented below is provided by the Commonwealth of Virginia, Department of Environmental Quality (DEQ) and updated as the incident is handled.)

Reference Number	7560
IR Number	2011-N-1934
County/City	Fairfax County
Status	Open
Assigned To	mImiller
Call Received Date	1/18/2011 12:00:00 AM
Call Received By	mImiller
Incident Date	
Site Name	KCR/Fairfax Water-Corbalis Tunneling Oil Discharge
Site Address	12025T New Dominion Pkwy-NE Corner of WO&D Trail & FFX Co Pkwy Reston VA,

### Reported By

No contact recorded.

### Scene Contact

No contact recorded.

### Responsible Party

No contact recorded.

### Property Owner

No contact recorded.

## Incident Detail

### Receptor Information

Affect	Impacted
Water Body	Sugarland Run/Potomac River
High Range Amount	
Low Range Amount	
Unit	
Other Water Body	
Threat To:	
Characterize Incident As:	Accidental

Terrorism Threat

No

## Materials involved

Name	Amount	Estimate Low	Amount Estimate High	Unit Type
Hydraulic oil	1	-1		Gallons
Oil (Lubricating)	1	-1		Gallons

## Site Summary Notes

No notes

## Incident Type

Petroleum	Surface Spill, Petroleum
Water	Point Source, Water

## Events

Received Date	Event Status	User	Tracking Number	Due Date	Completed Date	Compliance Date
1/18/2011 4:55:18 PM	Notification Sent	mlmiller				
1/18/2011 4:44:30 PM	Date IR Initiated	mlmiller				
1/18/2011 4:43:10 PM	Call Received	mlmiller				
	Site Visit	mlmiller			1/19/2011 12:00:00 AM	
	Site Visit	mlmiller			1/20/2011 12:00:00 AM	
	Site Visit	mlmiller			2/14/2011 12:00:00 AM	
	Site Visit	mlmiller			2/8/2011 12:00:00 AM	
	Task Letter	mlmiller		3/21/2011 12:00:00 AM	2/2/2011 12:00:00 AM	

## Sewage

Duration of event	0
Impact of event	
Other Impact	
Steps to reduce, prevent, mitigate	
System Components	
Other System Components	
Cause of Event	



Description of Steps Taken to  
Reduce, Prevent, Mitigate

Corrective Action Taken

Dry or Wet	N/A
Precipitation in inches	0
What type of discharge?	N/A
Discharge Volume	0
Unknown Discharge Volume	No

## CEDS

No records

## Documents

T:\PReP Application Files\NRO Attachment Files\2011N1934

## Call Info

*IMPORTANT: The information below is presented **as it was reported** to the Commonwealth of Virginia, Department of Environmental Quality (DEQ); this information is not updated if and when errors are found by DEQ staff. Refer to the "Incident Report Information" section above for validated data.*

Incident Date/Time

City/ County Fairfax County

## Location Description

Fairfax Water-Water Tunneling Work, 1801 Fairfax County Parkway, Reston. Construction site is located at the intersection of FFX Co Pkwy & the Old Dominion Washington Trail, NE corner.

## Incident Description

Contractor for Fairfax Water is discharging water and oil into a SWMP next to construction activity at 1801 Fairfax Co Pkwy. Caller stated work is for a water tunnel and equipment used for the tunneling goes through 20 gal/day of hydraulic oil and gear oil. This results in a sheen/oil discharge to the SWMP. The only treatment for the discharged water is a filter bag. This has been going on for about two weeks. No mention of petroleum odors associated w/ discharge. Co conducting work is from OH but caller does not know the Co name. Caller did not want to provide name.

## Material Description

hydraulic & gear oil

Incident Still Occurring Yes

Have other State, Local, or  
Federal Agencies been notified? No

Agencies Notified

Impacted Waterbody most likely Sugarland Rn

Permitted Facility No

Facility Name

Applicable Permit ID

**Reported By**

ANONYMOUS ANONYMOUS

-

**Responsible Party**

-

**Contact on Scene**

-

**Property Owner**

-

## Woodard, Dawn (DEQ)

---

**From:** Miller, Mark (DEQ)  
**Sent:** Monday, February 14, 2011 2:55 PM  
**To:** jkassouf@kassouftunnel.com; jfoley@creqcc.com; jleute@creqcc.com  
**Cc:** Glassman, Joseph (DEQ); Woodard, Dawn (DEQ); fmendler@fairfaxwater.org  
**Subject:** Petroelum Contaminated Water at KCR/Joint Venture Site  
**Attachments:** PetroGP08-RegistrationStatement-r1.doc

Mr. Kassouf, attached is the General Permit Registration Statement for Discharges from Petroleum Contaminated Sites. Please complete the attached statement and return it to the DEQ Regional Office at:

Virginia Department of Environmental Quality – Northern Regional Office  
13901 Crown Court, Woodbridge, VA 22193 Fax 703-583-3821  
Attn: Dawn Woodard  
E-mail: dawn.woodard@deq.virginia.gov  
703 583-3899

Please call myself, Dawn Woodard, or Joe Glassman (703-583-3808), with any questions regarding the permit application.

*Mark L. Miller - Pollution Response Program  
Virginia Department of Environmental Quality - NRO  
13901 Crown Court, Woodbridge, VA 22193  
Ph. 703-583-3864; Fax 703-583-3821  
E-mail: [Mark.Miller@deq.virginia.gov](mailto:Mark.Miller@deq.virginia.gov)  
[www.deq.virginia.gov/prep/](http://www.deq.virginia.gov/prep/)*

## Woodard, Dawn (DEQ)

---

**From:** Miller, Mark (DEQ)  
**Sent:** Wednesday, February 23, 2011 3:31 PM  
**To:** James Kassouf  
**Cc:** Glassman, Joseph (DEQ); Woodard, Dawn (DEQ)  
**Subject:** RE: Petroleum Contaminated Water at KCR/Joint Venture Site

James,

Item 7 is no. A Site Characterization Report has not been completed for the property.

For item 15, just a general topographic map of the area will suffice. It does not matter if the unnamed tributary to Sugarland Run is not illustrated on the map.

For item 16, this is if sanitary sewage is readily available in the area. Are your facilities connected to a sanitary sewage line? If so, it may be possible to discharge the water to the sanitary sewage collection system. However, you would need to contact the Fairfax Co Waste Water Collection Division relative to discharge to the collection system. The county contact for this is Joel King at 703 550 9740 ext 317.

Please let me know if you have any other questions.

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[www.deq.virginia.gov/prep/](http://www.deq.virginia.gov/prep/)*

---

**From:** James Kassouf [<mailto:jkassouf@creqcc.com>]  
**Sent:** Wednesday, February 23, 2011 2:32 PM  
**To:** Miller, Mark (DEQ)  
**Subject:** RE: Petroleum Contaminated Water at KCR/Joint Venture Site

Mr. Miller,

I hope this finds you well.

We are awaiting the results of water analysis test from both Atlas & A third party. I have the following questions;

- a. Item 7. I do not know how to answer this.
- b. Item 15. The stream that our runoff is entering is not shown on this map. How do I proceed?
- c. Item 16 We believe this was researched by our previous superintendent however there is no record of any permit applications. Given that we may have a runoff issue is it possible to obtain both permits?
- d. More to follow.....

Please call with any responses or questions.

Thank you for your time,

James R. Kassouf  
KCR Joint Venture  
11654 Plaza America Drive, # 177  
Reston, VA 20190-4700  
(216) 409-7509 Mobile  
(216) 395-0101 Fax  
[JKassouf@CREQCC.com](mailto:JKassouf@CREQCC.com)



Owner: Fairfax County Water Authority  
Title: Corbalis to Fox Mill 54" Water Main  
Project: 1859/4  
Contract No: 4500000646

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**From:** Miller, Mark (DEQ) [<mailto:Mark.Miller@deq.virginia.gov>]  
**Sent:** Monday, February 14, 2011 2:55 PM  
**To:** James Kassouf; Jim Foley; Jared Leute  
**Cc:** Glassman, Joseph (DEQ); Woodard, Dawn (DEQ); [fmendler@fairfaxwater.org](mailto:fmendler@fairfaxwater.org)  
**Subject:** Petroelum Contaminated Water at KCR/Joint Venture Site

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13901 Crown Court, Woodbridge, VA 22193 Fax 703-583-3821  
Attn: Dawn Woodard  
E-mail: [dawn.woodard@deq.virginia.gov](mailto:dawn.woodard@deq.virginia.gov)  
703 583-3899

Please call myself, Dawn Woodard, or Joe Glassman (703-583-3808), with any questions regarding the permit application.

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Virginia Department of Environmental Quality - NRO  
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E-mail: [Mark.Miller@deq.virginia.gov](mailto:Mark.Miller@deq.virginia.gov)  
[www.deq.virginia.gov/prep/](http://www.deq.virginia.gov/prep/)

## Woodard, Dawn (DEQ)

---

**From:** James Kassouf [jkassouf@creqcc.com]  
**Sent:** Wednesday, March 02, 2011 4:10 PM  
**To:** Miller, Mark (DEQ)  
**Cc:** Woodard, Dawn (DEQ); Glassman, Joseph (DEQ)  
**Subject:** RE: Petroleum Contaminated Water at KCR/Joint Venture Site

Mark,  
OK, I should be in all Day.  
James Kassouf

---

**From:** Miller, Mark (DEQ) [mailto:Mark.Miller@deq.virginia.gov]  
**Sent:** Wednesday, March 02, 2011 4:04 PM  
**To:** James Kassouf  
**Cc:** Woodard, Dawn (DEQ); Glassman, Joseph (DEQ)  
**Subject:** RE: Petroleum Contaminated Water at KCR/Joint Venture Site

James, we received the registration statement. Dawn Woodard has a couple of questions about the permit statement. She will likely contact you tomorrow.

*Mark L. Miller - Pollution Response Program  
Virginia Department of Environmental Quality - NRO  
13901 Crown Court, Woodbridge, VA 22193  
Ph. 703-583-3864; Fax 703-583-3821  
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[www.deq.virginia.gov/prep/](http://www.deq.virginia.gov/prep/)*

---

**From:** James Kassouf [mailto:jkassouf@creqcc.com]  
**Sent:** Tuesday, March 01, 2011 7:58 PM  
**To:** Woodard, Dawn (DEQ)  
**Cc:** Miller, Mark (DEQ)  
**Subject:** RE: Petroleum Contaminated Water at KCR/Joint Venture Site

Ms. Woodard,  
Mark Miller asked that I forward you the attached permit, I apologize for the delay.  
Please see attached.  
Thank you for your time,

James R. Kassouf  
KCR Joint Venture  
11654 Plaza America Drive, # 177  
Reston, VA 20190-4700  
(216) 409-7509 Mobile  
(216) 395-0101Fax  
[JKassouf@CREQCC.com](mailto:JKassouf@CREQCC.com)

*Owner: Fairfax County Water Authority  
Title: Corballis to Fox Mill 54" Water Main  
Project: 1859/4  
Contract No: 4500000646*

---

**From:** Miller, Mark (DEQ) [mailto:Mark.Miller@deq.virginia.gov]  
**Sent:** Wednesday, February 23, 2011 3:31 PM

**To:** James Kassouf  
**Cc:** Glassman, Joseph (DEQ); Woodard, Dawn (DEQ)  
**Subject:** RE: Petroleum Contaminated Water at KCR/Joint Venture Site

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[www.deq.virginia.gov/prep/](http://www.deq.virginia.gov/prep/)*

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**From:** James Kassouf [mailto:jkassouf@creqcc.com]  
**Sent:** Wednesday, February 23, 2011 2:32 PM  
**To:** Miller, Mark (DEQ)  
**Subject:** RE: Petroleum Contaminated Water at KCR/Joint Venture Site

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[JKassouf@CREQCC.com](mailto:JKassouf@CREQCC.com)

*Owner: Fairfax County Water Authority  
Title: Corbalis to Fox Mill 54" Water Main  
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---

**From:** Miller, Mark (DEQ) [mailto:Mark.Miller@deq.virginia.gov]  
**Sent:** Monday, February 14, 2011 2:55 PM  
**To:** James Kassouf; Jim Foley; Jared Leute  
**Cc:** Glassman, Joseph (DEQ); Woodard, Dawn (DEQ); fmendler@fairfaxwater.org  
**Subject:** Petroelum Contaminated Water at KCR/Joint Venture Site

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Attn: Dawn Woodard  
E-mail: dawn.woodard@deq.virginia.gov  
703 583-3899

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*[www.deq.virginia.gov/prep/](http://www.deq.virginia.gov/prep/)*